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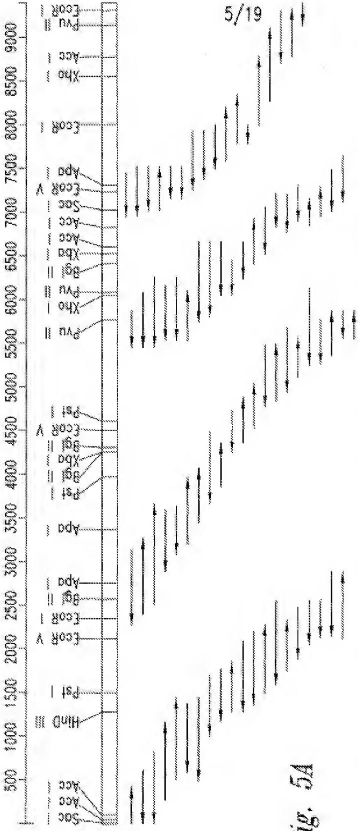

Fig. 5A

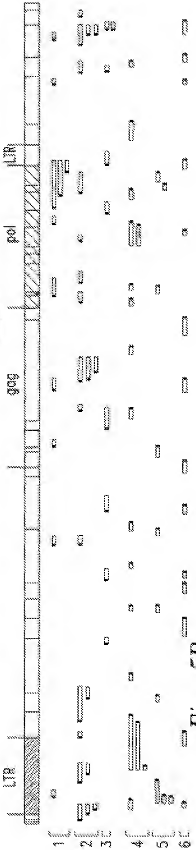

Fig. 5B

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE
BREAST-TUMOR SPECIFIC cDNA B18Ag1

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GGG AGA ACT TTT GAC GAT TTC CAC CGG TAT CTC CTC GTG GGT ATT CAG    96
Gly Arg Thr Phe Asp Asp Phe His Arg Tyr Leu Leu Val Gly Ile Gln
            20                  25                  30

GGA GCT GCC CAG AAA CCT ATA AAC TTG TCT AAG GCG ATT GAA GTC GTC   144
Gly Ala Ala Gln Lys Pro Ile Asn Leu Ser Lys Ala Ile Glu Val Val
        35                  40                  45

CAG GGG CAT GAT GAG TCA CCA GGA GTG TTT TTA GAG CAC CTC CAG GAG   192
Gln Gly His Asp Glu Ser Pro Gly Val Phe Leu Glu His Leu Gln Glu
    50                  55                  60

GCT TAT CGG ATT TAC ACC CCT TTT GAC CTG GCA GCC CCC GAA AAT AGC   240
Ala Tyr Arg Ile Tyr Thr Pro Phe Asp Leu Ala Ala Pro Glu Asn Ser
65                  70                  75                  80

CAT GCT CTT AAT TTG GCA TTT GTG GCT CAG GCA GCC CCA GAT AGT AAA   288
His Ala Leu Asn Leu Ala Phe Val Ala Gln Ala Ala Pro Asp Ser Lys
                85                  90                  95

AGG AAA CTC CAA AAA CTA GAG GGA TTT TGC TGG AAT GAA TAC CAG TCA   336
Arg Lys Leu Gln Lys Leu Glu Gly Phe Cys Trp Asn Glu Tyr Gln Ser
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Ala Phe Arg Asp Ser Leu Lys Gly Phe
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```

Fig. 6

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE
BREAST-TUMOR SPECIFIC cDNA B17Ag1

```
GC TGGGCACAGT GGCTCATACC TGTAATCCTG ACCGTTTCAG AGGCTCAGGT     60

CG CTTGAGCCCA AGATTTCAAG ACTAGTCTGG GTAACATAGT GAGACCCTAT    120

AA AAATAAAAAA ATGAGCCTGG TGTAGTGGCA CACACCAGCT GAGGAGGGAG    180

CT AGGAGA                                                   196
```

Fig. 7

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B17Ag2

GC TTGGGGGCTC TGACTAGAAA TTCAAGGAAC CTGGGATTCA AGTCCAACTG 60

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AA GGAAAACGAT GTCTGTGTAT AGCCAAGTCA GNTATCCTAA AAGGAGATAC 180

AT TAAATATCAG AATGTAAAAC CTGGGAACCA GGTTCCCAGC CTGGGATTAA 240

CA AGAAGACTGA ACAGTACTAC TGTGAAAAGC CCGAAGNGGC AATATGTTCA 300

TT GAAGGATGGC TGGGAGAATG AATGCTCTGT CCCCCAGTCC CAAGCTCACT 360

CT CCTTTATAGC CTAGGAGA 388

Fig. 8

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B13Ag2a

GC CTATAATCAT GTTTCTCATT ATTTTCACAT TTTATTAACC AATTTCTGTT 60

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TG ATTTCTACAT CAGATGCTCT TTCCTTTCCT GTTTATTTCC TTTTTATTTC 180

GG TCGAATGTAA TAGCTTTGTT TCAAGAGAGA GTTTTGGCAG TTTCTGTAGC 240

CT GCTCATGTCT CCAGGCATCT ATTTGCACTT TAGGAGGTGT CGTGGGAGAC 300

CT ATTTTTTCCA TATTTGGGCA ACTACTA 337

Fig. 9

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE
BREAST-TUMOR SPECIFIC cDNA B13Ag1b

GC CATACAGTGC CTTTCCATTT ATTTAACCCC CACCTGAACG GCATAAACTG 60

GC TGGTGTTTTT TACTGTAAAC AATAAGGAGA CTTTGCTCTT CATTTAAACC 120

AT TTCATATTTT ACGCTCGAGG GTTTTTACCG GTTCCTTTTT ACACTCCTTA 180

TT TAAGTCGTTT GGAACAAGAT ATTTTTTCTT TCCTGGCAGC TTTTAACATT 240

TT TGTGTCTGGG GGACTGCTGG TCACTGTTTC TCACAGTTGC AAATCAAGGC 300

CC AAGAAAAAAA AATTTTTTTG TTTTATTTGA AACTGGACCG GATAAACGGT 360

CG GCTGCTGTAT ATAGTTTTAA ATGGTTTATT GCACCTCCTT AAGTTGCACT 420

GG GCGGNTTTTG NATAGAAAGT NTTTANTCAC ANAGTCACAG GGACTTTTNT 480

NA CTGAGCTAAA AAGGGCTGNT TTTCGGGTGG GGGCAGATGA AGGCTCACAG 540

TC TCTTAGAGGG GGGAACTNCT A 571

Fig. 10

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE
BREAST-TUMOR SPECIFIC cDNA B13Ag1a

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CC GCACTGAAAC TTCACCTTCT AACTGTCTAC CTAACCAAAT TCTACCCTTC   180

GG TGCGTGCTCA CTACTCTTTT TTTTTTTTTT TTTNTTTTGG AGATGGAGTC   240

CA GCCCAGGGGT GGAGTACAAT GGCACAACCT CAGCTCACTG NAACCTCCGC   300

TT CATGAGATTC TCCTGNTTCA GCCTTCCCAG TAGCTGGGAC TACAGGTGTG   360

TG CCTGGNTAAT CTTTTTTNGT TTTNGGGTAG AGATGGGGGT TTTACATGTT   420

TG GTNTCGAACT CCTGACCTCA AGTGATCCAC CCACCTCAGG CTCCCAAAGT   480

TA CAGACATGAG CCACTGNGCC CAGNCCTGGT GCATGCTCAC TTCTCTAGGC   540
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Fig. 11

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B11Ag1

```
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GC ACTCTGACTA CACGAAATTG TTCAGATGTG ATGGATTTAT GACAGTTGAT    180

GA GATTATTAAG TGATTATTTT AAAGGGAATC CATTAATTCC AGAATATCTT    240

TC AAGATGATAT AGAAATAGAA CAGAAAGAGA CTACAAATGA AGATGTATCA    300

TA TTGAAGAGCC TATAGTAGAA AATGAATTAG CTGCATTTAT TAGCCTTACA    360

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AC AAAATATAAC TCGATTGCAT TTGGATGATG GAATACTAAA TCTGGCAAAA    540

GG AGCTACTAGT AACCTCTCTT TTTGAGATGC AAAATTTTCT TTTAGGGTTT    600

CT ACTTTACGGA TATTGGAGCA TAACGGGA                        638
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Fig. 12

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B3CA3c

ACTGATGGAT GTCGCCGGAG GCGAGGGGCC TTATCTGATG CTCGGCTGCC TGTTCGTGAT 60

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GATGGCGGCT TCGGCGGCGT TTATGACCCC GGTCTCCTCG CCGGTTAACA CCCTGGTGCT 240

TGGCCCTGGC AAGTACTCAT TTAGCGATTT TGTCAAAATA GGCGTG 286

Fig. 13

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B9CG1

AG CAGCCCCTTC TTCTCAATTT CATCTGTCAC TACCCTGGTG TAGTATCTCA 60

CA TTTTTATAGC CTCCTCCCTG GTCTGTCTTT TGATTTTCCT GCCTGTAATC 120

AC ATAACTGCAA GTAAACATTT CTAAAGTGTG GTTATGCTCA TGTCACTCCT 180

AA ATAGTTTCCA TTACCGTCTT AATAAAATTC GGATTTGTTC TTTNCTATTN 240

CA CCTATGACCG AA 262

Fig. 14

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE
BREAST-TUMOR SPECIFIC cDNA B9CG3

```
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GA TATATTCTTC TACATTTAAA CAATAAAAAT AATCTATTTT TAAAAGCCTA    180

AG TTAGGTAAGA GTGTTTAATG AGAGGGTATA AGGTATAAAT CACCAGTCAA    240

TG CCTATGACCG A                          261
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Fig. 15

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE
BREAST-TUMOR SPECIFIC cDNA B2CA2

```
CGACGTCGGT AAAATCGGAC ATGAAGCCAC CGCTGGTCTT TTCGTCCGAG CGATAGGCGC    60

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TATGAATCTT GTTGTGAAAA TACTCGCCGC CTTCGTTCGA CGACGTCGCG TCGAAATCTT   180

AATCATGGTT GAGCCGGATG CTGCCCCCGA AGCCCT                             276
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Fig. 16

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B3CA1

CCCAGGTCAA CCAGGCTGCA ACACGCAGGT CCTTGGATTG GGCACGAAGC AGCGCTTCGC 60

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CCAGCTCATT TTCCAGCGCC TCGTATTCGC TGGAAAAACG CACATCCTCA CCCGCAAAGA 180

CATCCTTTGA AATCGGCTGT TCCGCGAGTT CCAGATANTG CGAGGAGAGC TTGCTCGAAT 240

AGGTCATCCT AACCCTTCAA TGCACACCAT GTGCGCCAAT GAATATCTTA ACAATTCAAC 300

TAGTTGGCAT AANAACCGAA CGAAAATCCC AATAGTCTGA AGAGCTCTTT TG 352

Fig. 17

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B3CA2

CTGCATGTCC ACGGCCTGGA TTTACGGGTG GTCGGCGTTC ACCCCTGGCA GCTGGCGCTC 60

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CCTATATGCC TACTGGCAAG GCCGAGCCCG TGGAAGGCGG ATTCAGGTTC ANCGGTCGCT 180

GGAGCTTTTC CACCGGCTCC ATGCATTGTG ACTGGCTGTT TCTAGGCGGT CTGTTGCCCA 240

AGCGTGATGG TACGTCTGGC CTGGAGCATG TGACTTTCTG 280

Fig. 18

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B3CA3

AG GGAGCAAGGA GAAGGCATGG AGAGGCTCAN GCTGGTCCTG GCCTACGACT 60

CT GTCGCCGGGG ATGGTGGAGA ACTGAAGCGG GACCTCCTCG AGGTCCTCCG 120

TC NCCGTCCAGG AGGAGGGTCT TTCCGTGGTC TNGGAGGAGC GGGGGGAGAA 180

TC ATGGTCNACA TCCC 204

Fig. 19

NUCLEOTIDE SEQUENCE OF THE REPRESENTATIVE BREAST-TUMOR SPECIFIC cDNA B4CA1

TC AGGAGCGGGT AGAGTGGCAC CATTGAGGGG ATATTCAAAA ATATTATTTT 60

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CC AATCGCATGG ACATGTTAGA CTTATTTTCT GTTAATGATT NCTATTTTTA 180

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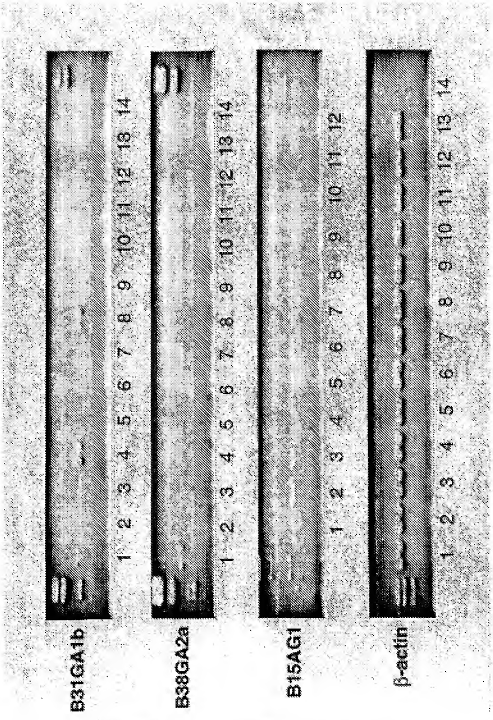
Fig. 20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1 2 3 4 5 6 7 8 9 10 11 12 13 14
B15AG1
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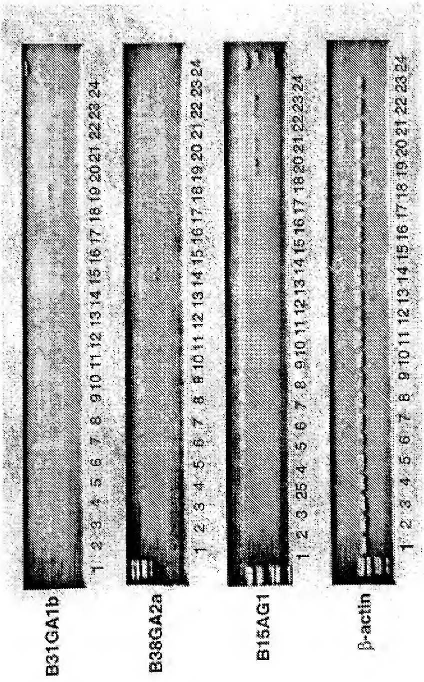
β-actin
1 2 3 4 5 6 7 8 9 10 11 12 13 14

Fig. 21A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B15AG1
1 2 3 25 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
β-actin
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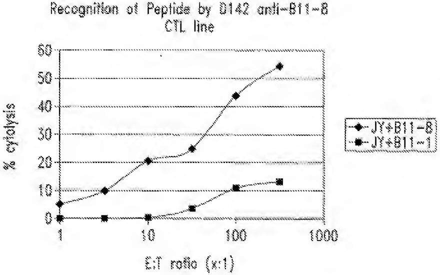
Fig. 21B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50
40
30
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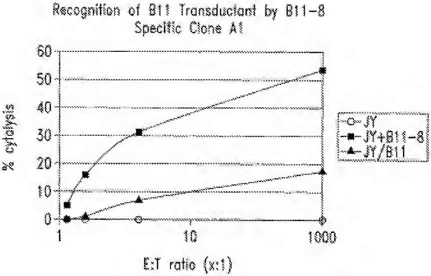
Fig. 22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JY
JY+B11-8
JY/B11

Fig. 23

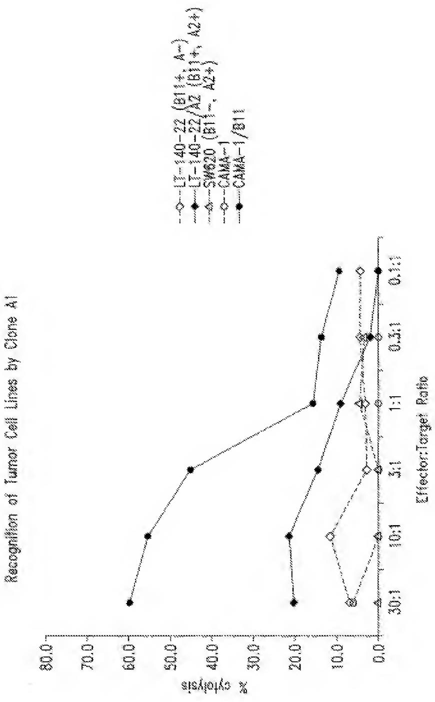
Recognition of Tumor Cell Lines by Clone A1

Fig. 24

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      Frudakis, Tony N.
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      Misher, Linda E.
      Dillon, Davin C.
      Retter, Marc W.
      Wang, Aijun
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nnccnntncc ctnntncncn nctnntnccn tnctnctccn tcttccttcc                 950

      <210> 7
      <211> 1086
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(1086)
      <223> n = A,T,C or G

      <400> 7
tctagagctc gcggccgcga gctcaattaa ccctcactaa agggagtcga ctcgatcaga       60
ctgttactgt gtctatgtag aaagaagtag acacaagaga ttccattttg ttctgtacta      120
agaaaaattc ttctgccttg agatgctgtt aatctgtaac cctagcccca acccgtgcct      180
cacagagaca tgtgctgtgt tgactcaagg ttcaatggat ttagggctat gctttgttaa      240
aaaagtgctt gaagataata tgcttgttaa aagtcatcac cattctctaa tctcaagtac      300
ccagggacac aatacaatgc ggaaggccgc agggacctct gtctaggaaa gccaggtatt      360
gtccaagatt tctcccnatg tgacagcctg agntatggcc tcatgggnag ggtaagacct      420
gactgtcccc cagcccgacn tcccccagcc cgacatcccc cagcccgacn cccgaaaagg      480
gtctgtgctg aggaagatta ataaaagagg aaggctcttt gcattgaagt aagaagaagg      540
ctctgtctcc tgctcgtccc tgggcaataa aatgtcttgg tgttaaaccc gaatgtatgt      600
tctacttact gagaatagga gaaacaatcc ttagggctgg aggtgagacc ccctggcggc      660
atactgctct ttaatgcacg agatgtttgt ataactgcca tccagggcca ncccctttcn      720
ttaacttttt atganacaaa aactttgttc acttttcctg cgaancctcc cccctattan      780
cctattggcc tgcccatccc ctccccaaan ggtgaaaana tgttcntaaa tncgagggaa      840
tccaaaacnt ttcccgtttg gtcccctttc caaccccgtc cctgggccnn tttcctcccc      900
aacntgtccc ggntccttcn ttcccncccc cttcccngan aaaaaacccc gtntganggn      960
gcccccctca attataacct ttccnaaacn aanngggtcn aaggtggttt gnttccggtg     1020
cggctggcct tgaggtcccc cctnccccc aatttggaan cccgtttttn ttattgcccn     1080
ntcccc                                                                1086

      <210> 8
      <211> 1177
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(1177)
      <223> n = A,T,C or G

      <400> 8
nccatttaga tgttgacaan ntaaacaagc ngctcnggca gctgaaaaaa gccactgata       60
aagcatcctg gagtatcaga gtttactgtt agatcagcct catttgactt cccctcccac      120
atggtgttta aatccagcta cactacttcc tgactcaaac tccactattc ctgttcatga      180
ctgtcaggaa ctgttggaaa ctactgaaac tggcngacct gatcttcaaa atgtgcccct      240
aggnaaggtg gatgccacng tgttcacaga cagtaccncc ttcctcgaga agggactacg      300
```

```
aggggccggt gcanctgtta ccaaggagac tnatgtgttg tgggctcagg ctttaccaac      360
aaacacctca ncncnnaagg ctgaattgat cgccctnact caggctctcg gatggggtaa      420
gggatattaa cgttaacact gacagtaggt acgcctttgc tactgtgcat gtacgtggag      480
ccatctacca ggagcgtggg ctactcactc ggcaggtggc tgtnatccac tgtaaangga      540
catcaaaagg aaaacnnggc tgttgcccgt ggtaaccana aaactgatcn ncagctcnaa      600
gatgctgtgt tgactttcan tcacnactct taaacttgct gccnacantc tcctttccca      660
accagatctg cctgacaatc cccatactca aaaaaaaaan aanactggcc ccgaacccna      720
accaataaaa acggggangg tnggtngane nncctgaccc aaaaataatg gatcccccgg      780
gctgcaggaa ttcaattcan cctratcaat acccccaacn nggagggggg ggccngtncc      840
cattnaccct ntattnactc tttnnacccc ccccgggcnt cctttttnaa ctngtgaaag      900
ggaaaacctg ncttaccaan ttatnacctg gaccntcccn ttccnnggtn gnttanaaaa      960
aaaagcccnc antcccntcc naaatttgca cngaaaggna aggaatttaa cctttatttt     1020
ttnatccttt antttgtann ccccctttta cccaggcgaa cngccatcnt ttaanaaaaa     1080
aaanagaang tttatttttc cttngaacca tcccaataaa aancacccgc nggggaacgg     1140
ggnggaaggc cnctcacccc ctttntgtng gngggac                              1177
```

```
<210> 9
<211> 1146
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(1146)
<223> n = A,T,C or G

<400> 9
nccanttnat gatgttgtct ttttggcctc tctttggata ctttccctct cttcagaggt       60
gaaaagggtc aaanggagct gttgacagtc atcncaggtg ggccaatgtg tccagagtac      120
agactccatc agtgaggtca aagcctgggg cttttcagag aggggaggat tatgggtttt      180
ccaataatac aagtcagaag tagaaagaag ggacataaac caggaagggg gtggaggact      240
catcacccag agggacttgt gcctctctca gtggtagtag aggggctact tcctccaacc      300
acggttgcaa ccaagaggca atgggtgatg agcctacagg ggacatcnnc gaggagacat      360
gggatgaccc taagggagta ggctggtttt aaggcggtgg gactgggtga gggaaactct      420
cctcttcttc agagagaagc agtacagggc gagctgaacc ggctgaaggt cgaggcgaaa      480
acacggtctg gctcaggaag accttggaag taaaattatg aatggtgcat gaatggagcc      540
atggaagggg tgctcctgac caaactcagc cattgatcaa tgttagggaa actgatcagg      600
gaagccggga atttcattaa caacccgcca cacagcttga acattgtgag gttcagtgac      660
ccttcaaggg gccactccac tccaactttg gccattctac tttgcnaaat tccnaaaact      720
tcctttttta aggccgaatc cntantccct naaaaacnaa aaaaaatctg cnnctattct      780
ggaaaaggcc cancccttac caggctggaa gaaatttcnc attttttttt ttttgaangg      840
cntttnttaa attgaacctn aattcncccc cccaaaaaaa aacccnccng gggggcggat      900
ttccaaaaac naattccctt accaaaaaac aaaaacccnc cnttnntncc ttccnccctn      960
ttcttttaat tagggagaga tnaagccccc caatttccng gcctngatnn gtttcccccc     1020
cccccatttt ccnaaacttt ttcccancna ggaanccncc cttttttnng gtcngattna     1080
acaaccttcc aaacccattt tccnnaaaaa ntttgntngg ngggaaaaan accnantttt     1140
atagan                                                                1146

<210> 10
<211> 545
<212> DNA
<213> Homo sapien

<400> 10
cttcattgag tacgggcccc ctcgaggtcg acggtatcga taagcttgat atcgaattcc       60
tgcagcccgg gggatccact agttctagag tcaggaagaa ccaccaacct tcctgatttt      120
tattggctct gagttctgag gccagttttc ttcttctgtt gagtatgcgg gattgtcagg      180
cagatctggc tgtggaaagg agactgtggg cagcaagttt agaggcgtga ctgaaagtca      240
```

```
cactgcatct tgagctgctg aatcagcttt ctggttacca cgggcaacag ccgtgttttc      300
cttttgatgt actttacagt ggattacagc cacctgctga ggtgagtagc ccacgctcct      360
ggtagatggc tccacgtaca tgcacagtag caaaggcgta cctgctgtca gtgttaacgt      420
taatatcctt accccatcgg agagcctgag tgagggcgat caattcagcc ctttgtgcct      480
gaggtgtttg ctggttaagc cctgaaacca caacacatct gtctccatgg taacagctgc      540
accgg                                                                  545

      <210> 11
      <211> 196
      <212> DNA
      <213> Homo sapien

      <400> 11
tctcctaggc tgggcacagt ggctcatacc tgtaatcctg accgtttcag aggctcaggt       60
ggggggatcg cttgagccca agatttcaag actagtctgg gtaacatagt gagaccctat      120
ctctacgaaa aaataaaaaa atgagcctgg tgtagtggca cacaccagct gaggagggag      180
aatcgagcct aggaga                                                      196

      <210> 12
      <211> 388
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(388)
      <223> n = A,T,C or G

      <400> 12
tctcctaggc ttgggggctc tgactagaaa ttcaaggaac ctgggattca agtccaactg       60
tgacaccaac ttacactgtg gnctccaata aactgctctc ttcctattcc ctctctatta      120
aataaaataa ggaaaacgat gtctgtgtat agccaagtca gntatcctaa aaggagatac      180
taagtgacat taaatatcag aatgtaaaac ctgggaacca ggttcccagc ctgggattaa      240
actgacagca agaagactga acagtactac tgtgaaaagc ccgaagnggc aatatgttca      300
ctctaccgtt gaaggatggc tgggagaatg aatgctctgt cccccagtcc caagctcact      360
tactatacct cctttatagc ctaggaga                                         388

      <210> 13
      <211> 337
      <212> DNA
      <213> Homo sapien

      <400> 13
tagtagttgc ctataatcat gtttctcatt attttcacat tttattaacc aatttctgtt       60
taccctgaaa aatatgaggg aaatatatga aacagggagg caatgttcag ataattgatc      120
acaagatatg atttctacat cagatgctct ttcctttcct gtttatttcc tttttatttc      180
ggttgtgggg ccgaatgtaa tagctttgtt tcaagagaga gttttggcag tttcagtagc      240
ttctgacact gctcatgtct ccaggcatct atttgcactt taggaggtgt cgtgggagac      300
tgagaggtct atttttccca tatttgggca actacta                               337

      <210> 14
      <211> 571
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(571)
```

```
      <223> n = A,T,C or G

      <400> 14
tagtagttgc catacagtgc ctttccattt atttaacccc cacctgaacg gcataaactg      60
agtgttcagc tggtgttttt tactgtaaac aataaggaga ctttgctctt catttaaacc     120
aaaatcatat ttcatatttt acgctcgagg gtttttaccg gttccttttt acactcctta     180
aaacagtttt taagtcgttt ggaacaagat attttttctt tcctggcagc ttttaacatt     240
atagcaaatt tgtgtctggg ggactgctgg tcactgtttc tcacagttgc aaatcaaggc     300
atttgcaacc aagaaaaaaa aatttttttg ttttatttga aactggaccg gataaacggt     360
gtttggagcg gctgctgtat atagttttaa atggtttatt gcacctcctt aagttgcact     420
tatgtggggg ggggnttttg natagaaagt ctttantcac anagtcacag ggacttttnt     480
cttttggnna ctgagctaaa aagggctgnt tttcgggtgg gggccgatga aggctcacag     540
gaggcctttc tcttagaggg gggaactnct a                                    571

      <210> 15
      <211> 548
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(548)
      <223> n = A,T,C or G

      <400> 15
tatatattta ataacttaaa tatactttga tcacccactg gggtgataag acaatagata      60
taaaagtatt tccaaaaagc ataaaaccaa agtatcatac caaaccaaat tcatactgct     120
tcccccaccc gcactgaaac ttcaccttct aactgtctac ctaaccaaat tctacccttc     180
aagtctttgg tgcgtgctca ctactctttt tttttttttt tttactttgg agatggagtc     240
tggctgtgca gcccaggggt ggagtacaat ggcacaacct cagctcactg naacctccgc     300
ctcccaggtt catgagattc tcctgnttca gccttcccag tagctgggac tacaggtgtg     360
catcaccatg cctggntaat cttttttagt tttngggtag agatgggggt tttacatgtt     420
ggccaggntg gtntcgaact cctgacctca agtgatccac ccacctcagg ctcncaaagt     480
gctaggatta caggcatgag ccactgngcc cagncctggt gcatgctcac tttctctaggc     540
aactacta                                                              548

      <210> 16
      <211> 638
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(638)
      <223> n = A,T,C or G

      <400> 16
ttccgttatg cacatgcaga atattctatc ggtacttcag ctattactca tttgatgggc      60
gcaatccgag cctatcctca agatgagtat ttagaaagaa ttgatttagc gatagaccaa     120
gctggtaagc actctgacta cacgaaattg ttcagatgtg atggatttat gacagttgat     180
ctttggaaga gattattcag tgattatttt aaagggaatc cattaattcc agaatatctt     240
ggtttagctc aagatgctat agaaatagaa cagaaagaga ctacaaatga agatgtatca     300
ccaactgata ttgaagagcc tatagtagaa aatgaattag ctgcatttat tagccttaca     360
catagcgatt ttcctgatga atcttatatt cagccatcga catagcatta cctgatgggc     420
aaccttacga ataatagaaa ctgggtgcgg ggctattgat gaattcatcc ncagtaaatt     480
tggatatnac aaaatataac tcgattgcat ttggatgatg gaatactaaa tctggcaaaa     540
gtaactttgg agctactagt aacctctctt tttgagatgc aaaattttct tttagggttt     600
cttattctct actttacggg tattggagca taacggga                             638
```

```
<210> 17
<211> 286
<212> DNA
<213> Homo sapien

<400> 17
actgatggat gtcgccggag gcgaggggcc ttatctgatg ctcggctgcc tgttcgtgat      60
gtgcgcggcg attgggctgt ttatctcaaa cacggccacg gcggtgctga tggcgcctat     120
tgccttagcg gcggcgaagt caatggggct ctcacccatt ccttttgcca tggtggtggc     180
gatggcggcc tcggcggcgt ttatgacccc ggtctcactg ccggttaaca ccctggtgct     240
tggccctggc aagtactcat ttagcgattt tgtcaaaata ggcgtg                    286

<210> 18
<211> 262
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(262)
<223> n = A,T,C or G

<400> 18
tcggtcatag cagcccctnc ttctcaattt catctgtcac taccctggtg tagtatctca      60
tagccttaca tttttatagc ctcctccctg gtctgtcttt tgattttcct gcctgtaatc     120
catatcacac ataactgcaa gtaaacattt ctaaagtgtg gttatgctca tgtcactcct     180
gtgncaagaa atagtttcca ttacggtctt aataaaattc ggatttgttc tttnctattn     240
tcactcttca cctatgaccg aa                                              262

<210> 19
<211> 261
<212> DNA
<213> Homo sapien

<400> 19
tcggtcatag caaagccagt ggtttgagct ctctactgtg taaactccta aaccaaggcc      60
atttatgata aatggtggca ggatttttat tataaacatg tacccatgca aatttcctat     120
aactctgaga tatattcttc tacatttaaa caataaaaat aatctatttt taaaagccta     180
atttgcgtag ttaggtaaga gtgtttaatg ggagggtata aggtataaat caccagtcaa     240
cgttttctcg cctatgaccg a                                               261

<210> 20
<211> 294
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(294)
<223> n = A,T,C or G

<400> 20
tacaacgagg cgacgtcggt aaaatcggac atgaagccac cgctggtctt ttcgtccgag      60
cgataggcgc cggccagcca gcgggacggt tgcccggatg gcgaagcgag ccggagttct     120
tcggactgag tatgaatctt gttgtgaaaa tactcgccgc cttcgttnga cgacgtcgng     180
tcgaaatctt cganctcctt acgatcgaag tcttcgtggg cgacgatcgc ggtcagttcc     240
gccccacgga aatcatggtt gagccggatg ctgancccga agnccttgtt tgta           294
```

<210> 21
<211> 208
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 21
```
ttggtaaagg gcatggacgc agacgcctga cgtttggctg aaaatctttc attgattcgt      60
atcaatgaat aggaaaattc ccaaagaggg aatgtcctgt tgctcgccag tttttntgtt     120
gttctcatgg anaaggcaan gagctcttca gactattggn attntcgttc ggtcttctgc     180
caactagtcg ncttgcnang atcttcat                                        208
```

<210> 22
<211> 287
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(287)
<223> n = A,T,C or G

<400> 22
```
nccnttgagc tgagtgattg agatntgtaa tggttgtaag ggtgattcag gcggattagg      60
gtggcgggtc acccggcagt gggtctcccg acaggccagc aggatttggg gcaggtacgg     120
ngtgcgcatc gctcgactat atgctatggc aggcgagccg tggaaggngg atcaggtcac     180
ggcgctggag ctttccacgg tcaatgaatt gagatggctg ttctaggcgg ctgttgccaa     240
gcgtgatggt acgctggctg gagcattgat ttctggtgcc aaggtgg                   287
```

<210> 23
<211> 204
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(204)
<223> n = A,T,C or G

<400> 23
```
ttgggtaaag ggagcaagga gaaggcatgg agaggctcan gctggtcctg gcctacgact      60
gggccaagct gtcgacgggg atggtggaga actgaagcgg gacatcctcg aggtcctccg     120
ncgttacttc ncagtccagg aggagggtct ttccgtggtc tnggaggagc ggggggagaa     180
gatnctcctc atggtcnaca tccc                                            204
```

<210> 24
<211> 264
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(264)

```
        <223> n = A,T,C or G

        <400> 24
tggattggtc aggagagggt agagtggcac cattgagggg atattcaaaa atattatttt        60
gtcctaaatg atagttgctg agtttttctt tgacccatga gttatattgg agtttatttt       120
ttaactttcc aatcgnatgg acatgttaga cttatttttct gttaatgatt nctattttta      180
ttaaattgga tttgagaaat tggttnttac tatatcaatt tctggtattt gttgagtttg       240
acattatagc ttagtatgtg acca                                              264

        <210> 25
        <211> 376
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(376)
        <223> n = A,T,C or G

        <400> 25
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtggtg        60
tgnacccgca atcccagcta cttgggaggt tgagacacaa gaatcaccta natgtgggag       120
gtcaaggttg catgagtcat gattgtgcca ctgcactcca gcctgggtga cagaccgagc       180
ccctgcctca anagaanaag aataggaagt tcagaaatcn tggntgtggn gcccagcaat       240
ctgcatctat ncaaccoctg caggcaangc tgatgcagcc tangttcaag agctgctgtt       300
tctggaggca gcagttnggg cttccatcca gtatcaggcc cacactcgca cnagccatct       360
gtcctccgta tgtnac                                                       376

        <210> 26
        <211> 372
        <212> DNA
        <213> Homo sapien

        <220>
        <221> misc_feature
        <222> (1)...(372)
        <223> n = A,T,C or G

        <400> 26
ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtggtggtg        60
tgcacctgta atcccagcta cttgggcggc tgagacacaa gaaccaccta aatgtgggag       120
ggtcaaggtt gcatgagtca tgatcgcgcc actgcactcc agcctgggtg acagactgag       180
accctgcctc aaaagaaaaa gaataggaag ttcagaaacc ctgggtgtgg ngcccagcaa       240
tctgcattta aacaatccct gcaggcaatg ctgatgcagc ctaagttcaa gagctgctgt       300
tctggaggca gnagtaaggg cttccatcca gcatcaggcn caacactgca aaagcacctg       360
tcctcgttgg ta                                                           372

        <210> 27
        <211> 477
        <212> DNA
        <213> Homo sapien

        <400> 27
ttctgtccac atctacaagt tttattiatt ttgtgggttt tcagggtgac taagtttttc        60
cctacattga aaagagaagt tgctaaaagg tgcacaggaa atcatttttt taagtgaata       120
tgataatatg ggtccgtgct taatacaact gagacatatt tgtttctctgt tttttagag       180
tcacctctta aagtccaatc ccacaatggt gaaaaaaaaa tagaaagtat ttgtttctaac      240
tttaaggaga ctgcagggat tctccttgaa aacggagtat ggaatcaatc ttaaataaat       300
```

atgaaattgg ctggtctctt gggataagaa attcccaact cagtgtgctg aaattcaact 360
gacttttttt gggaaaaaat agtcgaaaat gtcaatttgg tccataaaat acatgttact 420
attaaaagat atttaaagac aaattctttc agagctctaa gattggtgtg gacagaa 477

<210> 28
<211> 438
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(438)
<223> n = A,T,C or G

<400> 28
tctncaacct cttgactgtc aaaaacctta taggctatct ctaaaagctg actggtattc 60
atttcagcaa aatccctcta gttttggag tttcctttta ctatctgggg ctgcctgcgc 120
cacaaatgcc aaattaagag catggctatt ttcgggggct gacaggtcaa aaggggtgta 180
aatccgataa gcctcctgga ggtgctctaa aaacactcct ggtgactcat catgcccctg 240
gacgacttca atcgacttag acaagtttat aggtttctgg gcagctacct gaataccoac 300
gaggagatac cggtggaaat cgtcaaaagt tctcccctcca cttgagaaat ttgggtccca 360
attaggtccc aattgggtct ctaatcacta ttcctctagc ttcctcctcc ggnctatcgg 420
ttgatgtgag gttgaaga 438

<210> 29
<211> 620
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(620)
<223> n = A,T,C or G

<400> 29
aagagggtac cagccccaag ccttgacaac ttccataggg tgtcaagcct gtgggtgcac 60
agaagtcaaa aattgagttt tgggatcctc agcctagatt tcagaggata taaagaaaca 120
cctaacacct agatattcag acaaaagttt actacaggga tgaagctttc acggaaaacc 180
tctactagga aagtacagaa gagaaatgtg ggtttggagc cccaaacacg aatcccctct 240
agaacactgc ctaatgaaac tgtgagaaga tggccactgt catccagaca ccagaatgat 300
agacccacca aaaacttatg cccatattgcc tataaaacct acagacactc aatgccagcc 360
ccatgaaaaa aaaactgaga agaagactgt ncccctacaat gccacccggag cagaactgcc 420
ccaggccatg gaagcacagc tcttatatca atgtgacctg gatgttgaga catggaatcc 480
aangaaatcn ttttaanact tccacggttn aatgactgcc ctattanatt cngaacttan 540
atccnggccc gtgacctctt tgctttggcc attccccctt tttggaatgg ctcttttttt 600
cccatgcctg tnccctctta 620

<210> 30
<211> 100
<212> DNA
<213> Homo sapien

<400> 30
ttacaacgag gggtcaatg tcataaatgt cacaataaaa caatctcttc tttttttttt 60
tttttttttt tttttttttt tttttttttt tttttttcct 100

<210> 31
<211> 762

<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(762)
<223> n = A,T,C or G

<400> 31
tagtctatgc gccggacaga gcagaattaa attggaagtt gccctnggga atttctaccn 60
acactcttcc tgaaaagaga aagaaaagag gcaggaaaga ggttaggatt tcattttcaa 120
gagtcagcta attaggagag cagagtttag acagcagtag gcacnccatg atacaaacca 180
tggacaaagt ccctgtttag taactgccag acatgatcct gctcaggttt tgaaatctct 240
atgcccataa aagatggaga gcaggagtgc catccacatc aacacgtgtc caagaaagag 300
tctcagggag acaagggtat caaaaaacaa gattcttaat gggaaggaaa tcaaaaccaa 360
aaattagatt tttctctaca tatatataat atacagatat ttaacacatt attccagagg 420
tggctccagt ccttggggnt tgagagatgg tgaaaacttt tgttccacat taacttctgc 480
tctcaaattc tgaagtatat cagaatggga caggcaatgt tttgctccac actggggcac 540
agacccaaat ggttctgtgc ccgaagaaga gaagcccgaa agacatgaag gatgcttaag 600
gggggttggg aaagccaaat tggtantatc ttttcctcct gcctgtgttc cngaagtctc 660
cnctgaagga attcttaaaa cccttgtgga ggaaatgccc ccttaccatg acaantggtc 720
ccattgcttt tagggngatg gaaacaccca gggttttgat cc 762

<210> 32
<211> 276
<212> DNA
<213> Homo sapien

<400> 32
tagtctatgc gtgtattaac ctcccctccn tcagtaacaa ccaaagaggc aggagctgtt 60
attaccaacc ccatcttaca gatgcatcaa taatgacaga gaagtgaagt gacttgcgca 120
cacaaccagt aaattggcag agtcagattt gaatccatgg agtctggtct gcactttcaa 180
tcaccgaata ccctttctaa gaaacgtgtg ctgaatgagt gcatggataa atcagtgtct 240
actcaacatc tttgcctaga tatcccgcat agacta 276

<210> 33
<211> 477
<212> DNA
<213> Homo sapien

<400> 33
tagtagttgc caaatatttg aaaatttacc cagaagtgat tgaaaacttt ttggaaacaa 60
aaacaaataa agccaaaagg taaaataaaa atatctttgc actctcgtta ttacctatcc 120
ataacttttt cacogtaagc tctcctgctt gttagtgtag tgtggttata ttaaactttt 180
tagttattat tttttattca cttttccact agaaagtcat tattgattta gcacacatgt 240
tgatctcatt tcattttttc tttttatagg caaaatttga tgctatgcaa caaaaatact 300
caagcccatt atcttttttc cccccgaaat ctgaaaattg caggggacag agggaagtta 360
tcccattaaa aaattgtaaa tatgttcagt ttatgtttaa aaatgcacaa aacataagaa 420
aattgtgttt acttgagctg ctgattgtaa gcagttttat ctcaggggca actacta 477

<210> 34
<211> 531
<212> DNA
<213> Homo sapien

<400> 34
tagtagttgc caattcagat gatcagaaat gctgctttcc tcagcattgt cttgttcaac 60
cgcatgccat ttggaacttt ggcagtgaga agccaaaagg aagaggtgaa tgacatatat 120

atatatatat attcaatgaa agtaaaatgt atatgctcat atacttccta gttatcagaa 180
tgagttaagc tttatgccat tgggctgctg catattttaa tcagaagata aaagaaaatc 240
tgggcatttt tagaatgtga tacatgtttt tttaaaactg ttaaatatta tttcgatatt 300
tgtctaagaa ccggaatgtt cttaaaattt actaaaacag tattgtttga ggaagagaaa 360
actgtactgt ttgccattat tacagtcgta caagtgcatg tcaagtcacc cactctctca 420
ggcatcagta tccacctcat agctttacac attttgacgg ggaatattgc agcatcctca 480
ggcctgacat ctgggaaagg ctcagatcca cctactgctc cttgctcgtt gatttgtttt 540
aaaatattgt gcctggtgtc actttaagcc cacagccctg cctaaaagcc agcagagaac 600
agaacccgca ccattctata ggcaactact a 631

<210> 35
<211> 578
<212> DNA
<213> Homo sapien

<400> 35
tagtagttgc cattccatat tacagaaggc tctgtataca tgacttattt ggaagtgatc 60
tgttttctat ccaaacccat ttatcgtaat ttcaccagtc ttggatcaat cttggtttcc 120
actgatacca tgaaacctac ttggagcaga cattgcacag ttttctgtgg taaaaactaa 180
aggtttattt gctaagctgt catcttatgc ttagtatttt ttttttacag tggggaattg 240
ctgagattac attttgttat tcattagata ctttgggata acttgacact gtcttctttt 300
tttcgctttt aattgctatc atcatgcttt tgaaacaaga acacattagt cctcaagtat 360
tacataagct tgcttgttac gcctggtggt ttaaaggact atctttggcc tcaggttcac 420
aagaatgggc aaagtgtttc cttatgttct gtagttctca ataaaagatt gccaggggcc 480
gggtactgtg gctcgcactg taatcccagc actttgggaa gctgaggctg gcggatcatg 540
ttagggcagg tgttcgaaac cagcctgggc aactacta 578

<210> 36
<211> 583
<212> DNA
<213> Homo sapien

<400> 36
tagtagttgc ctgtaatccc agcaactcag gaggctgggg caggagaatc agttgaacct 60
gggaggcaga agttgtaatt agccaagatc gcaccattgc acttcagcct gggcaacaag 120
agtgagattc catctcaaaa acaaaaaaaa gaaaaagaaa agaaaaggaa aaaacgtata 180
aacccagcca aaacaaaatg atcattcttt taataagcaa gactaattta atgtgtttat 240
ttaatcaaag cagttgaatc ttctgagtta ttggtgaaaa tacccatgta gttaatttag 300
ggttcttact tgggtgaacg tttgatgttc acaggttata aaatggttaa caaggaaaat 360
gatgcataaa gaatcttata aactactaaa aataaataaa atataaatgg ataggtgcta 420
tggatggagt ttttgtgtaa tttaaaatct tgaagtcatt ttggatgcta ataggttgtc 480
tggtaatttc cattaggaaa aggttatgat atggggaaac tgtttctgga aattgcggaa 540
tgtttctcat ctgtaaaatg ctagtatctc agggcaacta cta 583

<210> 37
<211> 716
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(716)
<223> n = A,T,C or G

<400> 37
gatctactag tcatntggat tctatccatg gcagctaagc ctttctgaat ggattctact 60
gctttctcgt tcttcaatcc agacccttat atatgtttat gttcacaggc agggcaatgt 120
ttagtgaaaa caattctaaa ttttttattt tgcattttca tgctaatttc cgtcacactc 180

cagcaggctt cctgggagaa taaggagaaa tacagctaaa gacattgtcc ctgcttactr 240
acagcctaat ggtatgcaaa accacttcaa taaagtaaca ggaaaagtac taaccaggta 300
gaatggacca aaactgatat agaaaaatca gaggaagaga ggaacaaata tttactgagt 360
cctagaatgt acaaggcttt ttaattacat attttatgta aggcctgcaa aaaacaggtg 420
agtaatcaac atttgtccca ttttacatat aaggaaactg aagcttaaat tgaataattt 480
aatgcataga ttttatagtt agacnatgtt caggtcccta tgttatactt actagctgta 540
tgaatatgag aaaataattt tgttattttc ttggcatcag tattttcatc tgcaaaataa 600
agctaaagtt atttagcaaa cagtcagcat agtgcctgat acatagtagg tgctccaaac 660
atgattacnc tantattngg tattanaaaa atccaatata ggcntggata aaaccg 716

<210> 38
<211> 688
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(688)
<223> n = A,T,C or G

<400> 38
ttctgtccac atatcctccc actttaattg ttaatcagca aaactttcaa tgaaaaatca 60
tccactttaa ccaggatcac acnaggaaac tgaaggtgta ttttttttta ccttaaaaaa 120
aaaaaaaaac accaaacaaa ccaaaacaga ttaacagcaa agagttctaa aaaatttacn 180
tttctcttac aactgtcatt cagagaacaa tagttcttaa gtctgttaaa tcttggcatt 240
aacagagaaa cttgatgaan agttgtactt ggaatattgt ggattttttt ttttgtctaa 300
tctcccccta ttgttttgcc aacagtaatt taagtttgtg tggaacatcc ccgtagttga 360
agtgtaaaca atgtatagga aggaatatat gataagatga tgcatcacat atgcattaca 420
tgtagggacn ttcacaactt catgcactca gannacctgc ttgaagagga ggagaggacg 480
gcccagggtc accatccagg tgccttgagg acagagaatg cagaagtggc actgttgaaa 540
tttagaagac catgtgtgaa tggtttcagg cctgggatgt ttgccaccaa gaagtgcctc 600
cgagaaattt ctttcccatt tggaatacag ggtggcttga tgggtacggt gggtgacccc 660
acgaagaaaa tgaaattctg ccctttcc 688

<210> 39
<211> 585
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(585)
<223> n = A,T,C or G

<400> 39
tagtagttgc cgcnnaccta aaanttggaa agcatgatgt ctaggaaaca tantaaaata 60
gggtatgcct atgtgctaca gagagatgtt agcatttaaa gtgcatantt ttatgtattt 120
tgacaaatgc atatncctct ataatccaca actgattacg aagctattac aattaaaaag 180
tttggccggg cgtggtgggc ggtggctgac gcctgtaatc ccagcacttt gggaggccga 240
ggcaggcgga tcacgaggtc gggagttcaa gaccatcctg gctaacacgg tgaaagtcca 300
tctctactaa aaatacgaaa aaattacncc ggcgtggtgg cgggcgcctg tagtcccagc 360
tactcgggag gctgaggcag gagaatggcg tgaacccagg aggcggagct tgcagtgagc 420
caacatcacg tcactgcccc ccagcctggg ggacaggaac aagantcccg tctcanaaaa 480
agaaaaatac tactnatant ttcnacttta ttttaantta cacagaactn cctctnggta 540
cccccttacc attcatctca cccactccct atagggcacn nctaa 585

<210> 40
<211> 478

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      <212> DNA
      <213> Homo sapien

      <400> 40
tctgtccaca ccaatcttag aagctctgaa aagaatttgt ctttaaatat cttttaatag        60
taacatgtat tttatggacc aaattgacat tttcgactgt tttttccaaa aaagtcaggt       120
gaatttcagc acactgagtt gggaatttct tatcccagaa gaccaaccaa tttcatattt       180
atttaagatt gattccatac tccgttttca aggagaatcc ctgcagtctc cttaaaggta       240
gaacaaatac ttcctatttt tttttcacca ttgtgggatt ggactttaag aggtgactct       300
aaaaaaacag agaacaaata tgtctcagtt gtattaagca cggacccata ttatcatatt       360
cacttaaaaa aatgatttcc tgtgcacctt ctggcaactt ctcttttcaa tgtaggaaaa       420
aacttagtca ccctgaaaac ccacaaaata aataaaactt gtagatgtgg acaga            475

      <210> 41
      <211> 423
      <212> DNA
      <213> Homo sapien

      <400> 41
taagagggta catcgggtaa gaacgtaggc acatctagag cttagagaag tctggggtag        60
gaaaaaaatc taagtattta taagggtata ggtaacattt aaaagtaggg ctagctgaca       120
ttatttagaa agaacacata cggagagata agggcaaagg actaagacca gaggaacact       180
aatatttagt gatcacttcc attcttggta aaaatagtaa cttttaagtt agcttcaagg       240
aagatttttg gccatgatta gttgtcaaaa gttagttctc ttgggtttat attactaatt       300
ttgttttaag atccttgtta gtgctttaat aaagtcatgt tatatcaaac gctctaaaac       360
attgtagcat gttaaatgtc acaatatact taccatttgt tgtatatggc tgtaccctct       420
cta                                                                     423

      <210> 42
      <211> 527
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(527)
      <223> n = A,T,C or G

      <400> 42
tctcctaggc taatgtgtgt gtttctgtaa aagtaaaaag ttaaaaattt taaaaataga        60
aaaaagctta tagaataaga atatgaagaa agaaaatatt tttgtacatt tgcacaatga       120
gtttatgttt taagctaagt gttattacaa aagagccaaa aaggttttaa aaattaaaac       180
gtttgtaaag ttacagtacc cttatgttaa tttataattg aagaaagaaa aacttttttt       240
tataaatgta gtgtagccta agcatacagt atttataaag tctggcagtg ttcaataatg       300
tcctaggcct tcacattcac tcactgactc acccagagca acttccagtc ctgtaagctc       360
cattcgtggt aagtgcccta tacaggtgca ccatttattt tacagtattt ttactgtacc       420
ttctctatgt ttccatatgt ttcgatatac aaataccact ggttactatn gcccnacagg       480
taattccagt aacacggcct gtatacgtct ggtaccccta gngaaga                     527

      <210> 43
      <211> 331
      <212> DNA
      <213> Homo sapien

      <400> 43
tcttcaacct cgtaggacaa ctctcatatg cctgggcact atttttaggt tactaccttg        60
gctgcccttc tttaagaaaa aaaaaagaag aaaaaagaac ttttccacaa gtttctcttc       120
ctctagttgg aaaattagag aaatcatgtt tttaattttg tgttatttca gatcacaaat       180
```

```
tcaaacactt gtaaacatta agcttctgtt caatcccctg ggaagaggat tcattctgat      240
atttacggtt caaaagaagt tgtaatattg tgcttggaac acagagaacc agttattaac      300
ttcctactac tattatataa taaataataa c                                     331

      <210> 44
      <211> 592
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(592)
      <223> n = A,T,C or G

      <400> 44
ggcttagtag ttgccaggca aaatacrgtt gattctcctc aggagccacc cccaacaccc       60
ctgtttgcmt ctagacctat acctagacta aagtcccagc agacccctag aggtgaggtt      120
cagagtgacc cttgaggaga tgtgctacac tagaaaagaa ctgcttgagc tttctaattt      180
atataagcag aaatctggag aagagtcata ggaatggata ttaagggtgt gagataatgg      240
nggaaggaat atagagttgg atcaggctgg acttattgat ttgaacccac taagtagaga      300
ttctgctttt gatgttgcag ctcagggagt taaaaaaggt tttaatggtt ctaatagttt      360
atttgcttgg ttagctgaaa tatggataaa agatggccca ctgtgagcaa gctggaaatg      420
cctgatctct ctcagtttaa tgtagaggaa gggatccaaa agtttaggga ganttggatg      480
ctggraktgg attggtcact ttgrgaccca cccwtcccag ctgggagggt ccagaagata      540
cacccttgac caacgctttg cgaaatggat ttgtgatggc ggcaactact aa              592

      <210> 45
      <211> 567
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(567)
      <223> n = A,T,C or G

      <400> 45
ggcttagtag ttgccattgc gagtgcttgc tcaacgagcg ttgaacatgg cggattgtct       60
agattcaacg gatttgagtt ttaccagcaa agcgaaccaa gcgcggccca gagaattatg      120
ggttggttgg ctttgaaaag atggaaatcc tgtaggccta gtcagaaaag ccttcttgca      180
gaacagttgg ttctcgggcg aacgctcatc aagatgccca ttggaaaggc tagcgtgtat      240
ttgggagagc ctgatagcgt gtcttctgat gatgtttgtg cttggacagt gacaaaagat      300
atgcaaagca agtccgaact agacgtcaag cttcgtgagc aaattattgt agactcctac      360
ttatactgtg aggaatgata gccaagggtg gggactttaa gactaaggtg gtttgtactt      420
gcgccgatga tcccaggcag caagaactga tcgctagttt tatacgggca actactaagc      480
cgaattccag cacactggcg gccgttacta attggatccg anctcggtac cagcttgatg      540
catagcttga gttwtctata ntgtcnc                                          567

      <210> 46
      <211> 908
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(908)
      <223> n = A,T,C or G
```

```
      <400> 46
gagcgaaaga ccgagggcag ngnntamgng cgangaagcg gagagggcca aaaagcaacc        60
gctttccccg gggggtgccg attcattaag gcaggtggag gacaggtttc ccgatggaag       120
gcggcagggg cgcaagcaat taatgtgagt agggcattca ttagcacccg ggcttaacat       180
ttaagcttcg ggttggtatg tggtgggaat tgtgagcgga taacaatttc acacaggaaa       240
cagctatgac catgattacg ccaagctatt taggtgacat tatagaataa ctcaagttat       300
gcatcaagct tggtaccgag ttcggatcca ctagtaacgg ccgccagtgt gtggaattcg       360
gcttagtagt tgccgaccat ggagtgctac ctaggctaga atacctgagy tcctccctag       420
cctcactcac attaaattgt atcttttcta cattagatgt cctcagcgcc ttatttctgc       480
tggacwatcg ataaattaat cctgatagga tgatagcagc agttcattta ctgagagtat       540
gttaatgtgt catccctcct atataacgta tttgcatttt actggagcaa ttctggagat       600
aatccctgaa ggcaaaggaa tgaatcttga gggtgagaaa gccagaatca gtgtccagct       660
gcagttgtgg gagaaggtga tattatgtat gtctcagaag tgacaccata tggccaacta       720
ctaagcccga attccagcac actggcgggc gttactaatg gatccgagct cggtaccaag       780
cttgatgcat agcttgagta tctatagtgt cactaaatag cttggcgtaa tcatggtcat       840
agctgtttcc tgtgtgaaat tgttatccgc tcacaattcc acacaacata cgagccggaa       900
cataaagt                                                                908

      <210> 47
      <211> 480
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(480)
      <223> n = A,T,C or G

      <400> 47
tgccaacaag gaaagtttta aatttccctt tgaggattct tggtgatcat caaattcagt        60
ggtttttaag gttgttttct gtcaaataac tctaacttta agccaaacag tatatggaag       120
cacagataka atattacaca gataaaagag gagttgatct aaagtaraga tagttggggg       180
ctttaatttc tggaacctag gtctccccat cttcttctgt gctgaggaac ttcttggaag       240
cggggattct aaagttcttt ggaagacagt ttgaaaacca ccatgttgtt ctcagtacct       300
ttatttttaa aaagtaggtg aacattttga gagagaaaag ggcttggttg agatgaagtc       360
cccccccccc cttttttttt ttttagctga aatagataac ctatgttaaa rgaarggatt       420
attatttacc atgccaytar acacatgctc tttgatgggc ayctccatac cctccttaag       480

      <210> 48
      <211> 591
      <212> DNA
      <213> Homo sapien

      <400> 48
aagagggtac cgagtggaat ttccgcttca ctagtctggt gtggctagtc ggtttcgtgg        60
tggccaacat tacgaacttc caactcaacc gttcttggac gttcaagcgg gagtaccggc       120
gaggatggtg gcgtgaattc tggcctttct ttgccgtggg atcggtagcc gccattcatg       180
gtatgtttat caagatcttc ttcactaacc cgacctctcc gatttacctg cccgagccgt       240
ggtttaacga gggagggggg atccagtcac gcgagtactg gtcccagatc ttcgccatcg       300
tcgtgacaat gcctatcaac ttcgtcgtca ataagctgtg gaccttccga acggtgaagc       360
actccgaaaa cgtccggtgg ctgctgtgcg gtgactccca aaatcttgat aacaacaagg       420
taaccgaatc gcgctaagga accccggcat ctcgggtact ctgcatatgc gtacccctta       480
agccgaattc cagcacactg gcggccgtta ctaattggat ccgaactcgg taaccaagcc       540
tgatgcgtaa cttgagttat tctatagtgt ccctaaaata aactggcgtt a                591

      <210> 49
      <211> 454
      <212> DNA
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<213> Homo sapien

<400> 49
aagagggtac ctgccttgaa atttaaatgt ctaaggaaac tgggagatga ttaagagttg      60
gtgtggccta gtcacaccaa aatgtattta ttacatcctg ctcctttcta gttgacagga     120
aagaaagctg ctgtggggaa aggagggata aatactgaag ggatttacta aacaaatgtc     180
catcacagag ttttcctttt tttttttttg agacagagtc ttgctctgtc acccaggctg     240
gaatgcagtg gtatgatctc agttgaatgc aacctctacc tcctaggttc aagcgattct     300
catgcctcag cctcctgagc agctgggact ataggcgcat gctaccatgc caggctaatt     360
tttatatttt tattagagac ggggtgttgc catgttggcc aggcaggtct cgaactcctg     420
ggcctcagat gatctgcccc acctcggcct ctta                                 454

<210> 50
<211> 463
<212> DNA
<213> Homo sapien

<400> 50
aagagggtac caaaaaaaag aaaaaggaaa aaaagaaaaa caacttgtat aaggctttct      60
gctgcataca gctttttttt tttaaataaa tggtgccaac aaatgttttt gcattcacac     120
caattgctgg ttttgaactc gtactcttca aaggtacttg tgcaaatcaa tccaatagtg     180
atgccccgta ggttttgtgg actgcccacg ttgtctacct tctcatgaag gagccattga     240
gagactgttt ggacatgcct gtgttcatgt agccgtgatg tccggggccc gtgtacatca     300
tattaccgtg ggggtgggtc tgcattggct gctgggcata tggatgggtg cccatcatgc     360
ccatctgcat ctgcataggg tattggggcg tttgatccat atagccatga ttgctgtggt     420
agccactgtt catcattggc tgggacatgc tgttacactc tta                       463

<210> 51
<211> 399
<212> DNA
<213> Homo sapien

<400> 51
cttcaacctc ccaaagtgct gggattacag gactgagcca ccacgctcag cctaagcctc      60
tttttcacta ccctctaagc gatctaccac agtgatgagg ggctaaagag cagtgcaatt     120
tgattacaat aatggaactt agatttatta attaacaatt cttccttagc atgttggttc     180
catcattatt aagagtatgg acttacttag aaatgagctt tcattttaag aatttcatct     240
ttgaccttcc ctattagtct gagcagtatg acactatacg tattttattt aactaaccta     300
ccttgagcta ttacttttta aaaggctata tacatgaatg tgtattgtca actgtaaagc     360
cccacagtat ttaattatat catgaagtct ttgaggttg                            399

<210> 52
<211> 392
<212> DNA
<213> Homo sapien

<400> 52
cttcaacctc aatcaacctt ggtaattgat aaaatcatca cttaactttc tgatataatg      60
gcaataatta tctgagaaaa aaaagtggtg aaagattaaa cttgcatttc tctcagaatc     120
ttgaaggcta tttgaataat tcaaaagcgg aatcagtagt atcagccgaa gaaactcact     180
tagctagaac gttggaccca tggatctaag tccctgccct tccactaacc agctgattgg     240
ttttgtgtaa acctcctaca cgcttgggct tggtcgcctc atttgtcaaa gtaaaggctg     300
aaataggaag ataatgaacc gtgtcttttt ggtctctttt ccatccatta ctctgatttt     360
acaaagaggc ctgtattccc ctggtgaggt tg                                   392

<210> 53
<211> 179
<212> DNA
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<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(179)
<223> n = A,T,C or G

<400> 53
ttcgggtgat gcctcctcag gctacagtga agactggatt acagaaaggt gccagcgaga 60
tttcagattc ctgtaaacct ctaaagaaaa ggagtcgcgc ctcaactgat gtagaaatga 120
ctagttcagc atacngagac acntctgcct ccgattctag aggactgagt gacctgcan 179

<210> 54
<211> 112
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(112)
<223> n = A,T,C or G

<400> 54
ttcgggtgat gcctcctcag gctacatcat natagaagca aagtagaana atcnngtttg 60
tgcatttcca cacanacaaa attcaaatga ntggaagaaa ttggganagt at 112

<210> 55
<211> 225
<212> DNA
<213> Homo sapien

<400> 55
tgagcttccg cttctgacaa ctcaatagat aatcaaagga caactttaac agggattcac 60
aaaggagtat atccaaatgc caataaacat ataaaaagga atttagcttc atcatcatca 120
gaagaatgca aattaaaacc atcatgagaa accactatgt cccactagaa tagataaaat 180
cttaaaagac tggtaaaacc aagtgttggt aaggcaagag gagca 225

<210> 56
<211> 175
<212> DNA
<213> Homo sapien

<400> 56
gctcctcttg ccttaccaac acattctcaa aaacctgtta gagtcctaag cattctcctg 60
ttagtattgg gattttaccc ctgtcctata aagatgttat gtaccaaaaa tgaagtggag 120
ggccatacnc tgagggaggg gagggatctc tagtgttgtc agaagcggaa gctca 175

<210> 57
<211> 223
<212> DNA
<213> Homo sapien

<400> 57
agccatttac cacccatgga tgaatggatt ttgtaattct agctgttgta ttttgtgaat 60
ttgttcaatt tgttgttttt ctgtgaaaca catacattgg atatgggagg taaaggagtg 120
tcccagttgc tcctggtcac tccctttata gccattactg tcttgtttct tgtaactcag 180
gttaggtttt ggtctctctt gctccactgc aaaaaaaaaa aaa 223

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<210> 58
<211> 211
<212> DNA
<213> Homo sapien

<400> 58
gttcgaaggt gaacgtgtag gtagcggatc tccaaactgg ggaactgtca aagacgaatt       60
aactgacttg gatcaatcaa atgtgactga ggaaacacct gaaggtgaag aacatcatcc      120
agtggcagac actgaaaata aggagaatga agttgaagag gtaaaagagg agggtccaaa      180
agagatgact ttggatgggt ggtaaatggc t                                     211

<210> 59
<211> 208
<212> DNA
<213> Homo sapien

<400> 59
gctcctcttg ccttaccaac tttgcaccca tcatcaacca tgtggccagg tttgcagccc       60
aggctgcaca tcaggggact gcctcgcaat accttatgct gttgctgctg actgatggtg      120
ctgtgacgga tgtggaagcc acaagtgagg ctgtggtgcg tgcctcgaac ctgcccatgt      180
cagtgatcat tatgggtggt aaatggct                                         208

<210> 60
<211> 171
<212> DNA
<213> Homo sapien

<400> 60
agccatttac caccaatact aaattctagt tcaaactcca acttcttcca taaaacatct       60
aaccactgac accagttggc aatagcttct tcttctttta acctcttaga gtatttatgg      120
tcaatgccac aaatttctgc aactgaataa agttggtaag gcaagaggag c               171

<210> 61
<211> 134
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(134)
<223> n = A,T,C or G

<400> 61
cgggtgatgc ctcctcaggc tttggtgtgc ccactcnact cactggcctc ttctccagca       60
actggtgaan atgtcctcan gaaaancncc acangcngct cagggtgggg tgggaacnct      120
canaatcatc nggc                                                        134

<210> 62
<211> 145
<212> DNA
<213> Homo sapien

<400> 62
agagggtaca tatgcaacag tatataaagg aagaagtgca ctgagaggaa cttcatcaag       60
gccatttaat caatcagtga tagagtcaag gctcaaccca ggtgtgacgg attccaggtc      120
ccaagctcct tactggtacc ctctt                                            145

<210> 63
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      <211> 297
      <212> DNA
      <213> Homo sapien

      <400> 63
tgcactgaga ggaattcaaa gggtttatgc caaagaacaa accagtcctc tgcagcctaa        60
ctcatttgtt tttgggctgc gaagccatgt agagggcgat caggcagtag atggtccctc       120
ccacagtcag cgccatggtg gtccggtaaa gcatttggtc aggcaggcct cgtttcaggt       180
agacgggcac acatcagctt tctggaaaaa cttttgtagc tctggagctt tgttttctcc       240
agcataatca tacactgtgg aatcggaggt cagtttagtt ggtaaggcaa gaggagc          297

      <210> 64
      <211> 300
      <212> DNA
      <213> Homo sapien

      <400> 64
gcactgagag gaacttccaa tactatgttg aataggagtg gtgagagagg gcatccttgt        60
cttgtgccgg ttttcaaagg gaatgcttcc agcttttgcc cattcagtat aatattaaag       120
aatgttttac cattttctgt cttgcctgtt tttctgtgtt tttgttggtc tcttcattct       180
ccatttttag gcctttacat gttaggaata tatttctttt aatgatactt cacttttggt       240
atcttttgtg agactctact catagtgtga taagcactgg gttggtaagg caagaggagc       300

      <210> 65
      <211> 203
      <212> DNA
      <213> Homo sapien

      <400> 65
gctcctcttg ccttaccaac tcacccagta tgtcagcaat tttatctgct ttacctacga        60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgcctt       120
ctcatgggtc tctctgctcc agttctgaac ctttctcttt tcctagaaca tgcatttatg       180
tcgatagaag ttcctctcag tgc                                               203

      <210> 66
      <211> 344
      <212> DNA
      <213> Homo sapien

      <400> 66
tacggggacc cctgcattga gaaagcgaga ctcactctga agctgaaatg ctgttgccct        60
tgcagtgctg gtagcaggag ttctgtgctt tgtgggctaa ggctcctgga tgacccctga       120
catggagaag gcagagttgt gtgcccctcc tcatggcctc gtcaaggcat catggactgc       180
cacaccacaa atgccgtttt tattaacgac atgaaattga aggagagaac acaattcact       240
gatgtgggtc gtaaccatgg atatggtcac atacagaggt gtgattatgt aaaggttaat       300
tccacccacc tcatgtggaa actagcctca atgcaggggt ccca                        344

      <210> 67
      <211> 157
      <212> DNA
      <213> Homo sapien

      <400> 67
gcactgagag gaacttcgta gggaggttga actggctgct gaggaggggg aacaacaggg        60
taaccagact gatagccatt ggatggataa tatggtggtt gaggagggac actacttata       120
gcagagggtt gtgtatagcc tgaggaggca tcacccg                                157

      <210> 68
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      <211> 137
      <212> DNA
      <213> Homo sapien

      <400> 68
gcactgagag gaacttctag aaagtgaaag tctagacata aaataaaata aaattttaaa        60
actcaggaga gacagcccag cacggtggct cacgcctgta atcccagaac tttgggaggc       120
tgaggaggca tcacccg                                                      137

      <210> 69
      <211> 137
      <212> DNA
      <213> Homo sapien

      <400> 69
cgggtgatgc ctcctcaggc tgtattttga agactatcga ctggacttct tatcaactga        60
aggatccgtt aaaaatacca gttgtactat ttctacctgt caaaatccat ttcaaatgct       120
gaagttcctc tcagtgc                                                      137

      <210> 70
      <211> 220
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(220)
      <223> n = A,T,C or G

      <400> 70
agcatgttga gcccagacac gcaatctgaa tgagtgtgca cctcaagtaa atgtctacac        60
gctgcctggr atgacatggc acaccatcnc gtggagggca caactctgct cngcctacwa       120
cgagggcant ctcatwgaca ggttccaacc accaaactgc aagaggctca nnaagtactr       180
ccagggtmya aggacmaagg tgggaytyca ycacwcatct                             220

      <210> 71
      <211> 353
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(353)
      <223> n = A,T,C or G

      <400> 71
cgttagggtc tctatccact gctaaaccat acacctgggt aaacnaggac natttaacar        60
tcccanctaa atatgccaag tgacttcaca tgtttatctt aaagatgtcc aaaacgcaac       120
tgattttctc ccctaaacct gtgatggtgg gatgattaan cctgagtggt ctacagcaag       180
ttaagtgcaa ggtgctaaat gaangtgacc tgagatacag catctacaag gcagtacctc       240
tcaacncagg gcaactttgc ttctcanagg gcatttagca gtgtctgaag taatttctgt       300
attacaactc acggggcggg gggtgaatat ctactggana gnagacccta acg              353

      <210> 72
      <211> 343
      <212> DNA
      <213> Homo sapien
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     <400> 72
gcactgagag gaacttccaa tacyatkatc agagtgaaca rgcarccyac agaacaggag     60
aaaatgttyg caatctctcc atctgacaaa aggctaatat ccagawtcta awaggaactr    120
aaacaaattt atgagaaaag aacarcaaac ctcawcaaaa agtgggtgaa ggawatgcts    180
aaargaagac atytattcag ccagtaaaca yatgaaaaaa aggctratra tcactgawca    240
ttagagaaar gcaaatcaaa accacaatga gataccatct yayrccagtt agaayggtga    300
tcattaaaar atcaggaaac aacagatgct ggacaaggtg tca                      343

     <210> 73
     <211> 321
     <212> DNA
     <213> Homo sapien

     <220>
     <221> misc_feature
     <222> (1)...(321)
     <223> n = A,T,C or G

     <400> 73
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac     60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atctttcaat ttgcttcatt    120
tcaaagttcc catgctgcaa aagtgccatc ctttggggta ctgttttctg agctccagtg    180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaaggtgg    240
cttgagttca gccttaaata ccatcttgaa atgacacaga gaaagaanga tgttgggtgg    300
gagtggatag agaccctaac g                                              321

     <210> 74
     <211> 321
     <212> DNA
     <213> Homo sapien

     <400> 74
gcactgagag gaacttcaga gagagagaga gagttccacc ctgtacttgg ggagagaaac     60
agaaggtgag aaagtctttg gttctgaagc agcttctaag atctttcaat ttgcttcatt    120
tcaaagttcc catgctgcaa aagtgccatc ctttggggta ctgttttctg agctccagtg    180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaatctt aaaaaggtgg    240
cttgagttca gccttaaata ccatcttgaa atgacacaga gaaagaagga tgttgggtgg    300
gagtggatag agaccctaac g                                              321

     <210> 75
     <211> 317
     <212> DNA
     <213> Homo sapien

     <400> 75
gcactgagag gaacttccac atgcactgag aaatgcatgt tcccaaggac tgaagtctgg     60
aactcagttt ctcagttcca atcctgattc aggtgtttac cagctacaca acttaagcaa    120
agtcagataa ccttagcttc ctcatatgca aaatgagaat gaaaagtact catcgctgaa    180
ttgttttgag gattagaaaa acatctggca tgcagtagaa attcaattag tattcatttt    240
nattctacta aattaaacaa ataggatttt tagtggtgga acttcagaca ccagaaatgg    300
gagtggatag agaacct                                                   317

     <210> 76
     <211> 244
     <212> DNA
     <213> Homo sapien

     <400> 76
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cgttagggtc tctatccact cccactactg atcaaactct atttatttaa ttatttttat      60
catactttaa gttctgggat acacgtgcag catgcgcagg tttgttgcat aggtatacac     120
ttgccatggt ggtttgctgc acccatcagt ccatcatcta cattaggtat ttctcctaat     180
gctatccctc ccctagcccc ttacaacccc aacaggcctc agtgtgtgaa gttcctctca     240
gtgc                                                                  244

      <210> 77
      <211> 254
      <212> DNA
      <213> Homo sapien

      <400> 77
cgttagggtc tctatccact gaaatctgaa gcacaggagg aagagaagca gtgctagtga      60
gatggcaagt tcwtttacca cactctttaa catttygttt agttttaacc tttatttatg     120
gataataaag gttaatattc ataatgcttt attttaaggc attcccraat ttgcataact     180
ctccttttgg agataccctt ttatctccag tgcaagtctg gatcaaagtg ataaamagaa     240
gttcctctca gtgc                                                       254

      <210> 78
      <211> 355
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(355)
      <223> n = A,T,C or G

      <400> 78
ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt      60
ccggatggnc acgaagacgc actggancac gtgcttacgt gcttttgctc tgttgatggc     120
cctgagggga cgcaggaccc ttatgaccct cagaatctrc acaacgggag atggcactgg     180
attganatcc antgacaccc gagacacccc aacaaccagn atatcantat attgatgtag     240
ttccrgtaga nggcccyctt gtgggaggaa gctccatnag ttggtcatct tcaacaggat     300
ctcaacagtt tccgatggct gtgatgggca tagtcatant taacantgta tcgaa          355

      <210> 79
      <211> 406
      <212> DNA
      <213> Homo sapien

      <400> 79
taagagggta ccagcagaaa ggttagtatc atcagatagc atcttatacg agtaatatgc      60
ctgctattcg aagtgtaatt gagaaggaaa atttcagcgt gctcactgac ctgcctgtag     120
ccccagtgac agctaggatg tgcattctcc agccatcaag agactgagtc aagttgttcc     180
ctaagtcaga acagcagact cagctctgac attcrgattc gaatgacact gttcaggaat     240
cggaatcctg tcgattagac tggacagctt gtggcaagtg aatttgcctg taacaagcca     300
gattttttaa aatttatatt gtaaataatg tgtgtgtgtg tgtgtgtata tatatatata     360
tgtacagtta tctaagttaa tttaaaagtt gtttggtacc ctctta                    406

      <210> 80
      <211> 327
      <212> DNA
      <213> Homo sapien

      <400> 80
tttttttttt tttactcggc tcagtctaat cctttttgta gtcactcata ggcaagactt      60
agggctagga tgatgattaa taagagggat gacataacta ttagtggcag gttagttgtt     120
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tgtagggctc atggtagggg taaaaggagg gcaatttcta gatcaaataa taagaaggta 180
atagctacta agaagaattt tatggagaaa gggacgcggg cggggatat agggtcgaag 240
ccgcactcgt aagggtgga tttttctatg tagccgttga gttgtggtag tcaaaatgta 300
ataattatta gtagtaagcc taggaga 327

<210> 81
<211> 318
<212> DNA
<213> Homo sapien

<400> 81
tagtctatgc ggttgattcg gcaatccatt atttgctgga ttttgtcatg tgttttgcca 60
atttgcattca taatttatta tgcatttatg cttgtatctc ctaagtcatg gtatataatc 120
catgcttttt atgttttgtc tgacataaac tcttatcaga gcccttgca cacagggatt 180
caataaatat taacacagtc tacatttatt tggtgaatat tgcatatctg ctgtactgaa 240
agcacattaa gtaacaaagg caagtgagaa gaatgaaaag cactactcac aacagttatc 300
atgattgcgc atagacta 318

<210> 82
<211> 338
<212> DNA
<213> Homo sapien

<400> 82
tcttcaacct ctactcccan taatagcttt ttgatgactt ctagcaagcc tcgctaacct 60
cgccttaccc cccactatta acctactggg agaactctct gtgctagtaa ccacgttctc 120
ctgatcaaat atcactctcc tacttacagg actcaacata ctagtcacag ccctatactc 180
cctctacata tttaccacaa cacaatgggg ctcactcacc cacccaccta acaacataaa 240
accctcattc acacgagaaa acaccctcat gttcatacac ctatccccca ttctcctcct 300
atccctcaac cccgacatca ttaccgggtt ttcctctt 338

<210> 83
<211> 111
<212> DNA
<213> Homo sapien

<400> 83
agccatttac caccccatcca caaaaaaaaa aaaaaaaaag aaaaatatca aggaataaaa 60
atagactttg aacaaaaagg aacatttgct ggcctgagga ggcatcaccc g 111

<210> 84
<211> 224
<212> DNA
<213> Homo sapien

<400> 84
tcgggtgatg cctgctcagg ccaagaagat aaagcttcag acccctaaca catttccaaa 60
aaggaagaaa ggagaaaaaa gggcatcatc cccgttccga agggtcaggg aggaggaaat 120
tgagggtggat tcacgagttg cggacaactc ctttgatgcc aagcgaggtg cagccggaga 180
ctgggggagag cgagccaatc aggttttgaa gttcctctca gtgc 224

<210> 85
<211> 348
<212> DNA
<213> Homo sapien

<400> 85
gcactgagag gaacttcgtt ggaaacgggt tttttcatg taaggctaga cagaagaatt 60

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ctcagtaact tccttgtgtt gtgtgtattc aactcacaaa gttgaacgat ctttacacca      120
gagcagactt gtaacactct twttgtggaa tttgcaagtg gagatttcag aagctttgaa      180
gtaaaaggta gaaaaggaaa tatcttccta taaaaactag acagaatgat tctcagaaac      240
ccctttgtga tgtgtgcgtt caactcacag agtttaacct ttcwtttcat agaagcagtt      300
aggaaacact atgtttgtaa agtctgcaag tggatagaga ccctaacg                   348

      <210> 86
      <211> 293
      <212> DNA
      <213> Homo sapien

      <400> 86
gcactgagag gaacttcytt gtgwtgtktg yattcaactc acagagttga aaswtamrtt       60
acabagwkaa ggcttkcaaa cactcttttt gtmgaatytg caagwggaka tttarrrcrc      120
tttgwggycw wysktmgaaw aggrwatatc ttcwystmca amctagacag aaksattctc      180
akaawstyyy ytgtgaagwa tgcrttcaac tcacagagkt kaacmatyct kytaatrgag      240
cagttwkgaa actctmrttc trtggatrct gcaagtggat agagacccta acg             293

      <210> 87
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 87
ctcctaggct                                                              10

      <210> 88
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 88
agtagttgcc                                                              10

      <210> 89
      <211> 11
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 89
ttccgttatg c                                                            11

      <210> 90
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA
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      <400> 90
tggtaaaggg                                                              10

      <210> 91
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 91
tcggtcatag                                                              10

      <210> 92
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 92
tacaacgagg                                                              10

      <210> 93
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 93
tggattggtc                                                              10

      <210> 94
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 94
cttcctaccc                                                              10

      <210> 95
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 95
ctttggctcc                                                              10
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<210> 96
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 96
ggaaccaatc 10

<210> 97
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 97
tcgatacagg 10

<210> 98
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 98
ggtactaagg 10

<210> 99
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 99
agtctatgcg 10

<210> 100
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

<400> 100
ctatccatgg 10

<210> 101
<211> 10

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      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 101
tctgtccaca                                                              10

      <210> 102
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 102
aagagggtac                                                              10

      <210> 103
      <211> 10
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 103
cttcaacctc                                                              10

      <210> 104
      <211> 20
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 104
gctcctcttg ccttaccaac                                                   20

      <210> 105
      <211> 20
      <212> DNA
      <213> Artificial Sequence

      <220>
      <223> Primer for amplification from breast tumor cDNA

      <400> 105
gtaagtcgag cagtgtgatg                                                   20

      <210> 106
      <211> 20
      <212> DNA
      <213> Artificial Sequence
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<220>
<223> Primer for amplification from breast tumor cDNA

<400> 106
gtaagtcgag cagtctgatg 20

<210> 107
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Primer for amplification from breast tumor cDNA

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ggtagtcaga attcttagga ggcacagggc tccagggcag atgctgaggg gtcttttatg      9360
aggtagcaca gcaaatccac ccaggatc                                         9388
```

```
<210> 142
<211> 419
<212> DNA
<213> Homo sapien

<400> 142
tgtaagtcga gcagtgtgat ggaaggaatg gtctttggag agagcatatc catctcctcc        60
tcactgcctc ctaatgtcat gaggtacact gagcagaatt aaacagggta gtcttaacca       120
cactattttt agctaccttg tcaagctaat ggttaaagaa cactttgggt ttacacttgt       180
tgggtcatag aagttgcttt ccgccatcac gcaataagtt tgtgtgtaat cagaaggagt       240
taccttatgg tttcagtgtc attctttagt taacttggga gctgtgtaat ttaggctttg       300
cgtattattt cactcctgtt ctccacttat gaagtgatgg tgtgttcggg tgtgtgtgcg       360
```

```
tgcgaatgtg cttccggcag ttaacataag caaataccca acatcaaact gctcgactt       419

      <210> 143
      <211> 402
      <212> DNA
      <213> Homo sapien

      <400> 143
tgtaagtcga gcagtgtgat gtccactgca gtgtgttgct gggaacagtt aatgagcaaa       60
ttgtatacaa tggctagtac attgaccggg atttgttgaa gctggtgagt gttatgactt      120
agcctgttag actagtctat gcacatggct ctggtcaact accgatctct catttctcca      180
gataaatccc ccatgcttta tattctcttc caaacatact atcctcatca ccacatagtt      240
cctttgttaa tgctttgttc tagactttcc cttttctgtt ttcttattca aacctatatc      300
tctttgcata gattgtaaat tcaaatgcca tcagggtgca ggcagttcat gtaagggagg      360
gaggctagcc agtgagatct gcatcacact gctcgactta ca                        402

      <210> 144
      <211> 224
      <212> DNA
      <213> Homo sapien

      <400> 144
tcgggtgatg cctcctcagg ccaagaagat aaagcttcag acccctaaca catttccaaa       60
aaggaagaaa ggagaaaaaa gggcatcatc cccgttccga agggtcaggg aggaggaaat      120
tgaggtggat tcacgagttg cggacaactc ctttgatgcc aagcgaggtg cagccggaga      180
ctggggagag cgagccaatc aggttttgaa gttcctctca gtgc                      224

      <210> 145
      <211> 111
      <212> DNA
      <213> Homo sapien

      <400> 145
agccatttac cacccatccc caaaaaaaaa aaaaaaaaag aaaaatatca aggaataaaa       60
atagactttg aaccaaaagg aacatttgct ggcctgagga ggcatcaccc g               111

      <210> 146
      <211> 565
      <212> DNA
      <213> Homo sapien

      <400> 146
tagcatgttg agcccagaca cttgtagaga gaggaggaca gttagaagaa gaagaaaagt       60
ttttaaatgc tgaaagttac tataagaaag ctttggcttt ggatgagact tttaaagatg      120
cagaggatgc tttgcagaaa cttcataaat atatgcaggt gattccttat ttcctcctag      180
aaatttagtg atacttgaaa taatgcccaa actttatttt cccctgagga aaactattct      240
acattactta agtaaggcat tatgaaaagt ttctttttag gtatagtttt tcctaattgg      300
gtttgacatt gcttcatagt gcctctgttt ttgtccataa tcgaaagtaa agatagctgt      360
gagaaaacta ttacctaaat ttggtatgtt gttttgagaa atgtccttat agggagctca      420
cctggtggtt tttaaattat tgttgctact ataattgagc taattataaa aacctttttg      480
agacatattt taaattgtct tttcctgtaa tactgatgat gatgttttcc catgcatttt      540
cttctgaatt gggaccattg ctgctgtgtc tgggctcaca tgcta                     585

      <210> 147
      <211> 579
      <212> DNA
      <213> Homo sapien
```

```
<220>
<221> misc_feature
<222> (1)...(579)
<223> n = A,T,C or G

<400> 147
tagcatgttg agcccagaca ctgggcagcg ggggtggcca cggcagctcc tgcccagccc      60
aagcgtgttt gtctgtgaag gaccctgacg tcacctgcca ggctagggag gggtcaatgt     120
ggagtgaatg ttcacccact ttcgcaggag tgtgcagaag ccaggtgcaa cttggtttgc     180
ttgtgttcat cacccctcaa gatatgcacc ctgctttcca aataaagcat caactgtcat     240
ctccagatgg ggaagacttt ttctcccacc agcaggcagg tccccatcca ctcagacacc     300
agcacgtcca cctctcgggg cagcaccacg tcctcnacct tctgctggta cacggtgatg     360
atgtcagcaa agccgttctg cangaccagc tgccccgtgt gctgtgccat ctcactggcc     420
tccaccgcgt acaccgctct aggccngcca tantgtgcac agaanaaatg atgatccagt     480
cccacagccc acgtccaaga ngactttatc cgtcagggat tctttattct gcaggatgac     540
ctgtggtatt aattgttcgt gtctgggctc aacatgcta                            579

<210> 148
<211> 249
<212> DNA
<213> Homo sapien

<400> 148
tgacaccttg tccagcatct gcaagccagg aagagagtcc tcaccaagat cccacacccg      60
ttggcaccag gatcttggac ttccaatctc cagaactgtg agaaataagt atttgtcgct     120
aaataaatct ttgtggtttc agatatttag ctatagcaga tcaggctgac taagagaaac     180
cccataagag ttacatactc attaatctcc gtctctatcc ccaggtctca gatgctggac     240
aaggtgtca                                                             249

<210> 149
<211> 255
<212> DNA
<213> Homo sapien

<400> 149
tgacaccttg tccagcatct gctattttgt gactttttaa taatagccat tctgactggt      60
gtgagatggt aactcattgt gggtttggtc tgcatttctc taatgatcag tgatattaag     120
ctttttttaa atatgcttgt tgaccacatg tatatcatct tttgagaagt gtctgttcat     180
atcctttgcc cactttttaa tttttttatc ttgtaaattt gtttaatttc cttacagatg     240
ctggacaagg tgtca                                                      255

<210> 150
<211> 318
<212> DNA
<213> Homo sapien

<400> 150
ttacgctgca acactgtgga ggccaagccg ggatcacttc ttcattctaa ctggagagga      60
gggaagttca agtccagcag agggtgggtg ggtagacagt ggcactcaga aatgtcagct     120
ggacccctgt ccccgcatag gcaggacagc aaggctgtgg ctctccaggg ccagctgaag     180
aacaggacac tgtctccgct gccacaaagc gtcagagact cccatcttcg aagcacggcc     240
tccttggtct tcctgcactt ccctgttctg ttagagacct ggttatagac aaggcttctc     300
cacagtgttg cagcgtaa                                                   318

<210> 151
<211> 323
<212> DNA
<213> Homo sapien
```

```
      <220>
      <221> misc_feature
      <222> (1)...(323)
      <223> n = A,T,C or G

      <400> 151
tnacgcngcn acnntgtaga ganggnaagg cnttccccac attnccccnt catnanagaa      60
ttattcnacc aagnntgacc natgccnttt atgacttaca tgcnnactnc ntaatctgta     120
tcnngcctta aaagcnnntc cactacatgc ntcancactg tntgtgtnac ntcatnaact     180
gtcngnaata ggggcncata actancgaaa tgcanttcat actgcttcca ntgccatcng     240
cgtgtggact tncctactat tcttntattc caagtagcat ctctggantg cttccccact     300
ctccacattg ttgcagcnat aat                                             323

      <210> 152
      <211> 311
      <212> DNA
      <213> Homo sapien

      <400> 152
tcaagattcc ataggctgac cagtccaagg agagttgaaa tcatgaagga gagtctatct      60
ggagagagct gtagttttga gggttgcaaa gacttaggat ggagttggtg ggtgtggtta     120
gtctctaagg ttgattttgt tcataaattt catgccctga atgccttgct tgcctcaccc     180
tggtccaagc cttagtgaac acctaaaagt ctctgtcttc ttgctctcca aactttctct     240
gaggatttcc tcagattgtc tacattcaga tcgaagccag ttggcaaaca agatgcagtc     300
cagagggtca g                                                          311

      <210> 153
      <211> 332
      <212> DNA
      <213> Homo sapien

      <400> 153
caagattcca taggctgacc aggaggctat tcaagatctc tggcagttga ggaagtctct      60
ttaagaaaat agtttaaaca atttgttaaa atttttctgt cttacttcat ttctgtagca     120
gttgatatct ggctgtcctt tttataatgc agagtgggaa ctttccctac catgtttgat     180
aaatgttgtc caggctccat tgccaataat gtgttgtcca aaatgcctgt ttagttttta     240
aagacggaac tccacccttt gcttggtctt aagtatgtat ggaatgttat gataggacat     300
agtagtagcg gtggtcagcc tatggaatct tg                                   332

      <210> 154
      <211> 345
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(345)
      <223> n = A,T,C or G

      <400> 154
tcaagattcc ataggctgac ctggacagag atctcctggg tctggccaag gacagcaggc      60
tcaagctcag tggagaaggt ttccatgacc ctcagattcc cccagaccct ggattgggtg     120
acattgcatc tcctcagaga gggaggagat gtaagtctgg gcttccacag ggacctggta     180
ctttaggatc agggtaccgc tggcctgagg cttggatcat tcanagcctg gggtggaat      240
ggctggcagc ctgtggcccc attgaaatag gctctggggc actccctctg ttcctanttg     300
aacttgggta aggaacagga atgtggtcan cctatggaat cttga                     345
```

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<210> 155
<211> 295
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(295)
<223> n = A,T,C or G

<400> 155
gacgcttggc cacttgacac attaaacagt tttgcataat cactancatg tatttctagt      60
ttgctgtctg ctgtgatgcc ctgccctgat tctctggcgt taatgatggc aagcataatc     120
aaacgctgtt ctgttaattc caagttataa ctggcattga ttaaagcatt atctttcaca     180
actaaactgt tcttcataaa acagcccata ttattatcaa attaagagac aatgtattcc     240
aatatccttt acggccaata tatttnatgt cccttaatta agagctactg tccgt          295

<210> 156
<211> 406
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(406)
<223> n = A,T,C or G

<400> 156
gacgcttggc cacttgacac tgcagtggga aaaccagcat gagccgctgc ccccaaggaa      60
cctcgaagcc caggcagagg accagccatc ccagcctgca ggtaaagtgt gtcacctgtc     120
aggtgggctt ggggtgagtg ggtgggggaa gtgtgtgtgc aaagggggtg tnaatgtnta     180
tgcgtgtgag catgagtgat ggctagtgtg actgcatgtc agggagtgtg aacaagcgtg     240
cgggggtgtg tgtgcaagtg cgtatgcata tgagaatatg tgtctgtgga tgagtgcatt     300
tgaaagtctg tgtgtgtgcg tgtggtcatg angggtaant antgactgcg caggatgtgt     360
gagtgtgcat ggaacactca ntgtgtgtgt caagtggccn ancgtc                    406

<210> 157
<211> 208
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> (1)...(208)
<223> n = A,T,C or G

<400> 157
tgacgcttgg ccacttgaca cactaaaggg tgttactcat cactttcttc tctcctcggt      60
ggcatgtgag tgcatctatt cacttggcac tcatttgttt ggcagtgact gtaancccana    120
tctgatgcat acaccagctt gtaaattgaa taaatgtctc taatactatg tgctcacaat    180
anggtanggg tgaggagaag gggagaga                                        208

<210> 158
<211> 547
<212> DNA
<213> Homo sapien

<220>
```

```
<221> misc_feature
<222> (1)...(547)
<223> n = A,T,C or G

<400> 158
cttcaacntc cttcaacctc cttcaacctc ctggatncaa acaatcatcc cacctcagac      60
tccttagtag ctgagactac agaatcacgc cactacatct ggctaaattt ttgtagagat     120
agggtttcat catgttgccc tggctggtct caaactcctg acctcaagca atgtgcccac     180
ctcagcctcc caaagtgctg ggattacagg cataagccac catgcccagt ccatnattaa     240
tctttcctac cacattctta ccacactttc ttttatgttt agatacataa atgcttacca     300
ttatgatacc attgcccaca gtattaagac agtaacatgc tgcacaggtt tgtagcctag     360
gaacagtagg caatacaaca tagcttaggt gtgtggtaga ctatacnatc taggtttgtg     420
taagttanac tttatgctgt ttacacaatg acaaaaccat ctaatgatgc atttctcaga     480
atgtatcctt gtcagtaagc tatgatgtac agggaacact gcccaaggac acagatattg     540
tacctgt                                                               547

<210> 159
<211> 203
<212> DNA
<213> Homo sapien

<400> 159
gatcccctgg ncttaccaac taacccagta tgtcagcaat tttatcnggt ttacctacga      60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgcctt     120
ctcatgggtc tccctgctcc agttctgaac ctttctcttt tcctagaaca tgnatttatg     180
tcgatagaag tccctctcag tgc                                             203

<210> 160
<211> 402
<212> DNA
<213> Homo sapien

<400> 160
tgtaagtcga gcagtgtgat gggtggaaca aggttgtaag cagtaattgc aaactgtatt      60
taaacaataa taataatatt tagcatttat agagcacttt atatatttaa agtacttgca     120
aacattagct aattaaatac cctctctgat tataatctgg atacaaatgc acttaaactc     180
aggacagggt catgagaraa gtatgcattt gaaagttggt gctagctatg ctttaaaaac     240
ctatacaatg atgggraagt tagagttcag attctgttgg actgtttttg tgcatttcag     300
ttcagcctga tggcagaatt agatcaratc tgcactcgat gactgtgctt gataacttat     360
cactgnaatc tgagtgttga tcatcacact gctcgactta ca                        402

<210> 161
<211> 193
<212> DNA
<213> Homo sapien

<400> 161
agcatgttga gcccagacac tgaccaggag aaaaaccaac caatagaaac acgcccagac      60
actgaccagg agaaaaacca accaataaaa acaggcccgg acataagaca aataataaaa     120
ttagcggaca aggacatgaa aacagctatt gtaagagcgg atatagtggt gtgtgtctgg     180
gcccaacatg cta                                                        193

<210> 162
<211> 147
<212> DNA
<213> Homo sapien

<400> 162
```

```
tgttgagccc agacactgac caggagaaaa accaaccaat aaaaacaggc ccggacataa      60
gacaaataat aaaattagcg gacaaggaca tgaaaacagc tattgtaaga gcggatatag     120
tggtgtgtgt ctgggctcaa catgcta                                         147

       <210> 163
       <211> 294
       <212> DNA
       <213> Homo sapien

       <400> 163
tagcatgttg agcccagaca caaatctttc cttaagcaat aaatcatttc tgcatatgtt      60
tttaaaacca cagctaagcc atgattattc aaaaggacta ttgtattggg tattttgatt     120
tgggttctta tctccctcac attatcttca tttctatcat tgacctctta tcccagagac     180
tctcaaactt ttatgttata caaatcacat tctgtctcaa aaatatcttc acccacttct     240
cttctgtttc tgcgtgtgta tgtgtgtgtg tgtgtgtctg ggctcaacat gcta           294

       <210> 164
       <211> 412
       <212> DNA
       <213> Homo sapien

       <220>
       <221> misc_feature
       <222> (1)...(412)
       <223> n = A,T,C or G

       <400> 164
cgggatcggc tttgagctgc agatgctgcc tgtgaccgca cccggcgtgg aacagaaagc      60
cacctggctg caagtgcgcc agagccgccc tgactacgtg ccgctgtggg gctggggcgt     120
gatgaactcc accgccctga aggaagccca ggccacggga taccccgccg acaagatgta     180
cggcgtgtgg tgggccggtg cggagcccga tgtgcgtgac gtgggcgaag gcgccaaggg     240
ctacaacgcg atggctctga acggctacgg cacgcagtcc aaggtgatcc angacatcct     300
gaaacacgtg cacgacaagg gccagggcac ggggcccaaa gacgaagtgg gctcggtgct     360
gtacaacggc ggcgtgatca tccagatgct ggacaaggtg tcagtcacta at             412

       <210> 165
       <211> 361
       <212> DNA
       <213> Homo sapien

       <400> 165
ccgacacctt gtacagcatc tgcatctgat gagagcctca gatggctacc actaatggca      60
gaaggcaaag gagaacaggc attgtatggc aagaaaggaa gaaagagaga ggggagaaag     120
gtgctaggtt cttttcaaca accagttctt gatggaactg agagtaagag ctcaaggcca     180
ggtgtggtga ctccaaccag taatccaaac attttaggag gctgaggcag gcagatgtct     240
tgaccccatg agtttgtgac cagcctgaac aacatcatga gactccatct ctacaataat     300
tacaaaaatt aatcaggcat tgtggtatgc cctgtagtcc cagatgctgg acaaggtgtc     360
a                                                                     361

       <210> 166
       <211> 427
       <212> DNA
       <213> Homo sapien

       <400> 166
tagactgact catgtcccct acacccaact atcttctcca ggtggccagg catgatagaa      60
tctgatcctg acttagggga atatttcttt tttactcccc atcttgattc cctgcccgtg     120
agtttcctgg ttcagggtaa gaaaggagct caggccaaag taatgaacaa atccatcctc     180
```

```
acagacgtac agaataagag aacwtggacw tagccagcag aacmcaaktg aaamcagaac      240
mcttamctag gatracaamc mcrraratar ktgcycmcmc wtataataga aaccaaactt      300
gtatctaatt aaatatttat ccacygtcag ggcattagtg gttttgataa atacgctttg      360
gctaggattc ctgaggttag aatggaaraa caattgcamc gagggtaggg gacatgagtc      420
aktctaa                                                                427

      <210> 167
      <211> 500
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(500)
      <223> n = A,T,C or G

      <400> 167
aacgtcgcat gctcccggcc gccatggcyg cgggatagac tgactcatgt cccctaagat       60
agaggagaca cctgctaggt gtaaggagaa gatggttagg tctacggagg ctccagggtg      120
ggagtcgttc cctgctaagg gagggtagac tgttcaacct gttcctgctc aggcctccac      180
tatagcagat gcgagcagga gtaggagaga gggaggtaag agtcagaagc ttatgttgtt      240
tatgcrggga aacgccrtat cgggggcagc cragttatta ggggacantr tagwyartcw      300
agntagcatc caaagcgngg gagttnaccc atatggttgg acctgcaggc ggtcgcatta      360
gtgattagca tgtgagcccc agacacgcat agcaacaagg acctaaactc agatcctgtg      420
ctgattactt aacatgaatt attgtattta tttaacaact ttgagttatg aggcatatta      480
ttaggtccat attacctgga                                                  500

      <210> 168
      <211> 358
      <212> DNA
      <213> Homo sapien

      <400> 168
ttcatcgctc ggtgactcaa gcctgtaatc ccagaacttt gggaggccga ggtgagcaga       60
tcacctgagg ttgggagttt gagaccagcc tggccaacat ggtgacaacc cgtctctgct      120
aaaaatacaa aaattagcca agcatggtgg catgcacttg taatcccagc tactcgggag      180
gctgaggcag gagaatcact tgaggccagg aggcagaggt tgcagtgagg cagaggttga      240
gatcatgcca ctgcactcca gcctgggcaa cagagtaaga ctccatctca aaaaaaaaaa      300
aaaaaaagaa tgatcagagc tacaaataca gaaaancttg agtcaccgag cgatgaaa        358

      <210> 169
      <211> 1265
      <212> DNA
      <213> Homo sapien

      <400> 169
ttctgtccac accaatctta gagctctgaa agaatttgtc tttaaatatc ttttaatagt       60
aacatgtatt ttatggacca aattgacatt ttcgactatt ttttcccaaa aaaagtcagg      120
tgaatttcag cacactgagt tgggaatttc ttatcccaga agwcggcacg agcaatttca      180
tatttattta agattgattc catactccgt tttcaaggag aatccctgca gtctgcttaa      240
aggtagaaca aatactttct attttttttt cacnattgtg ggattggact ttaagaggtg      300
atttaaaaaa aacagagaac aaatatgtct cagttgtatt aagnacggac ccatattatc      360
atattcactt aaaaaaatga tttcctgtgc actttttggc aacttctctt ttcaatgtag      420
ggaaaaactt agtcaccctg aaaacccaca aaataaataa aacttgtaga tgtgggcaga      480
artgtttggg gtggacattg tatgtgttta aattaaaccc tgtatcactg agaagctgtt      540
gtatgggtca gagaaaatga atgcttagaa gctgttnaca tctttcagag cagaagcaaa      600
ccacatgtct cagctatatt attatttatt ttttatgcat aaagtgaatc atttattctg      660
tattaatttc caaagggttt taccttctat ttaaatgctt tgaaaaacag tgcattgaca      720
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```
atgggttgat atttttcttt aaaagaaaaa tataattatg aaagccaaga taatctgaag      780
cctgttttat tttaaaactt tttatgttct gtggttgatg ttgtttgttt gtttgtttct      840
attttgttgg ttttttactt tgttttttgt tttgttttgt tttggtttgg catactacat      900
gcagtttctt taaccaatgt ctgtttggct aatgtaatta aagttgttaa tttatatgag      960
tgcatttcaa ctatgtcaat ggtttcttaa tatttattgt gtagaagtac tggtactttt     1020
tttatttaca atatgtttaa agagataaca gtttgatatg ctttcatgtg tttatagcag     1080
aagttattta tttctatggc attccagcgg atattttggt gtttgcgagg catgcagtca     1140
atattttgta cagttagtgg acagtattca gcaacgcctg atagcttctt tggccttatg     1200
ttaaataaaa agacctgttt gggatgtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa     1260
aaaaa                                                                 1265

      <210> 170
      <211> 383
      <212> DNA
      <213> Homo sapien

      <400> 170
tgtaagtcga gcagtgtgat gacgatattc ttcttattaa tgtggtaatt gaacaaatga       60
tctgtgatac tgatcctgag ctaggaggcg ctgttcagtt aatgggactt cttcgtactc      120
taattgatcc agagaacatg ctggctacaa ctaataaaac cgaaaaaagt gaatttctaa      180
attttttcta caaccattgt atgcatgttc tcacagcacc acttttgacc aatacttcag      240
aagacaaatg tgaaaaggat aatatagttg gatcaaacaa aaacaacaca atttgtcccg      300
ctaattatca aacagcacag ctacttgcct taattttaga gttactcaca ttttgtgtgg      360
aacatcacac tgctcgactt aca                                              383

      <210> 171
      <211> 383
      <212> DNA
      <213> Homo sapien

      <400> 171
tgggcacttt caatatcgca agttaaaaac aatgttgagt ttattatact tttgacctgc       60
ttagctcaac agggtgaagg catgtaaaga atgtggactt ctgaggaatt ttcttttaaa      120
aagaacataa tgaagtaaca ttttaattac tcaaggacta cttttggttg aagtttataa      180
tctagatacc tctacttttt gtttttgctg ttcgacagtt cacaaagacc ttcagcaatt      240
tacagggtaa aatcgttgaa gtagtggagg tgaaactgaa atttaaaatt attctgtaaa      300
tactataggg aaagaggctg agcttagaat cttttggttg ttcatgtgtt ctgtgctctt      360
atcatcacac tgctcgactt aca                                              383

      <210> 172
      <211> 699
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(699)
      <223> n = A,T,C or G

      <400> 172
tcgggtgatg cctcctcagg cttgtcgtta gtgtacacag agctgctcat gaagcgacag       60
cggctgcccc tggcacttca gaacctcttc ctctacactt ttggtgcgct tctgaatcta      120
ggtctgcatg ctggcggcgg ctctggccca ggcctcctgg aaagtttctc aggatgggna      180
gcactcgtgg tgctgagcca ggcactaaat ggactgctca tgtctgccgt catggagcat      240
ggcagcagca tcacacgnct ctttgtggtg tcctgctcgc tggtggtcaa cgccgtgctc      300
tcagcagtcc tgctacggct gcagctcaca gccgccttct tcctggccac attgctcatt      360
ggcctggcca tgcgcctgta ctatggcagc cgctagtccc tgacaactta caccctgatt      420
ccggaccctg tagattgggc gccaccacca gatcccccrc ccaggcctcc ctccctctcc      480
```

```
catcagcggc cctgtaacaa gtgccttgtg agaaaagctg gagaagtgag gganggcagg      540
ttatctctcg gaggttggtg gatgaagggg tacccctagg agatgtgaag tgtgggtttg      600
gttaaggaaa tgcttaccat ccccaccccc caaccaagtt nttccagact aaagaattaa      660
ggtaacatcc atacctaggc ctgaggaggc atcacccga                             699

      <210> 173
      <211> 701
      <212> DNA
      <213> Homo sapien

      <400> 173
tcgggtgatg cctcctcagg ccagatcaaa cttggggttg aaaactgtgc aaagaaatca       60
atgtcggaga aagaattttg caaaagaaaa atgcctaatc agtactaatt taataggtca      120
cattagcagt ggaagaagaa atgttgatat tttatgtcag ctattttata atcaccagag      180
tgcttagctt catgtaagcc atctcgtatt cattagaaat aagaacaatt ttattcgtcg      240
gaaagaactt ttcaatttat agcatcttaa ttgctcagga ttttaaattt tgataaagaa      300
agctccactt ttggcaggag tagggggcag ggagagagga ggctccatcc acaaggacag      360
agacaccagg gccagtaggg tagctggtgg ctggatcagt cacaacggac tgacttatgc      420
catgagaaga aacaacctcc aaatctcagt tgcttaatac aacacaagct catttcttgc      480
tcacgttaca tgtcctatgt agatcaacag caggtgactc agggacccag gctccatctc      540
catatgagct tccatagtca ccaggacacg ggctctgaaa gtgtcctcca tgcagggaca      600
catgcctctt cctttcattg ggcagagcaa gtcacttatg gccagaagtc acactgcagg      660
gcagtgccat cctgctgtat gcctgaggag gcatcacccg a                          701

      <210> 174
      <211> 700
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(700)
      <223> n = A,T,C or G

      <400> 174
tcgggtgatg cctcctcaag ccccaaaatc agagtccagg gtcagagcca caggagacag       60
ggaaagacat agatttaaac cggccccctt caggagattc tgaggctcag ttcactttgt      120
tgcagtttga acagaggcag caaggctagt ggttaggggc acggtctcta aagctgcact      180
gcctggatct gccttccagc tctgccagga accagctgcg tggccttgag ctgctgacac      240
gcagaaagcc ccctgtggac ccagtctcct cgtctgtaag atgaggacag gactctagga      300
accctttccc ttggtttggc ctcactttca caggctccca tcttgaactc catctactct      360
tttcctgaaa gcttgtaaaa gaaaaaagtg ctagcctggg caacatggca aaaccctgtc      420
tctacaaaaa atacaaaaat tagttgggtg tggtggcatg tgcctgtagt cccagccact      480
tgggaggtgc tgaggtggga ggatcacttg agcccgggag gtggaggttg cagtgagcca      540
agatcatgcc actgcactcc agcctgagta atagagtaag actctgtctc aaaaacaaca      600
acaacaacag tgagtgtgcc tctgtttccg ggttggatgg ggcaccacat ttatgcatct      660
ctcagatttg gacgctgcag cctgaggagg catcacccga                            700

      <210> 175
      <211> 484
      <212> DNA
      <213> Homo sapien

      <220>
      <221> misc_feature
      <222> (1)...(484)
      <223> n = A,T,C or G
```

<400> 175
tatagggcga attgggcccg agttgcatgc tcccggccgc catggccgcg ggattcgggt 60
gatgcctcct caggcttgtc tgccacaagc tacttctctg agctcagaaa gtgccccttg 120
atgagggaaa atgtcctact gcactgcgaa tttctcagtt ccattttacc tcccagtcct 180
ccttctaaac cagttaatac attcattcca caagtattta ctgattacct gctggtgcca 240
gggactattc tcaggctgaa gaaggtggga ggggagggcg gaacctgagg agcccactga 300
gccagcttta tatttcaacc atggctggcc catctgagag catctcccca ctctcgccaa 360
cctatcgggg catagcccag ggatgccccc aggcggccca ggttagatgc gtccctttgg 420
cttgtcagtg atgacataca ccttagctgc ttagctggtg ctggcctgag gaggcatcac 480
ccga 484

<210> 176
<211> 432
<212> DNA
<213> Homo sapien

<400> 176
tcgggtgatg cctcctcagg gctcaaggga tgagaagtga cttctttctg gagggaccgt 60
tcatgccacc caggatgaaa atggataggg acccacttgg aggacttgct gatatgtttg 120
gacaaatgcc aggtagcggg attggtactg gtccaggagt tatccaggat agattttcac 180
ccaccatggg acgtcatcgt tcaatcaaac tcttcaatgg ccatggggga cacatcatgc 240
ctcccacaca atgcagtttt ggagagatgg gaggcaagtt tatgaaaagc caggggctaa 300
gccagctcta ccataaccag agtcagggac tcttatccca gctgcaagga cagtcgaagg 360
atatgccacc tcggttttct aagaaaggac agcttaatgc agatgagatt agcctgagga 420
ggcatcaacc ga 432

<210> 177
<211> 788
<212> DNA
<213> Homo sapien

<400> 177
tagcatgttg agcccagaca cagtagcatt tgtgccaatt tctggttgga atggtgacca 60
catgctggag ccaagtgcta acatgccttg gttcaaggga tggaaagtca cacgtaagga 120
tggcaatgcc agtggaacca cgctgcttga ggctctggac tgcatcctac cacccactcg 180
cccaactgac aagcccttgc gcctgcctct ccaggatgtc tacaaaattg gtggtattgg 240
tactgttcct gttggccgag tggagactgg tgttctcaaa cccggtatgg tggtcacctt 300
tgctccagtc aacgttacaa cggaagtaaa atctgtcgaa atgcaccatg aagctttgag 360
tgaagctctt cctggggaca atgtgggctt caatgtcaag aatgtgtctg tcaaggatgt 420
tcgtcgtggc aacgttgctg gtgacagcaa aaatgaccca ccaatggaag cagctggctt 480
cactgctcag gtgattatcc tgaaccatcc aggccaaata agtgccggct atgcccctgt 540
attggattgc cacacggctc acattgcatg caagtttgct gagctgaagg aaaagattga 600
tcgccgttct ggtaaaaagc tggaagatgg ccctaaattc ttgaagtctg gtgatgctgc 660
cattgttgat atggttcctg gcaagcccat gtgtgttgag agcttctcag actatccacc 720
tttgggtcgc tttgctgttc gtgatatgag acagacagtt gcggtgggtg tctgggctca 780
acatgcta 788

<210> 178
<211> 786
<212> DNA
<213> Homo sapien

<400> 178
tagcatgttg agcccagaca cctgtgtttc tgggagctct ggcagtggcg gattcatagg 60
cacttgggct gcactttgaa tgacacactt ggctttatta gattcactag ttttaaaaaa 120
attgttgttc gtttcttttc attaaaggtt taatcagacc gatcagacag cataattttg 180
tatttcatga cagaaacgtt ggtacatttc ttcatgaatg agcttgcatt ctgaagcaag 240
agcctacaaa aggcacttgt tataaatgaa agttctggct ctagaggcca gtactctgga 300

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gtttcagagc agccagtgat tgttccagtc agtgatgcct agttatatag aggaggagta     360
cactgtgcac tcttctaggt gtaagggtat gcaactttgg atcttaaaat tctgtacaca     420
tacacacttt atatatatgt atgtatgtat gaaaacatga aattagtttg tcaaatatgt     480
gtgtgtttag tattttagct tagtgcaact atttcccact tatttattaa attgatgtaa     540
gacactttct tgttgacacc ttgaatatta atgttcaagg gtgcaatgtg tattccttta     600
gattgttaaa gcttaattac tatgatttgt agtaaattaa cttttaaaat gtatttgagc     660
cattctgtag tgtcgtaggg ctcttacagg gtgggaaaga ttttaatttt ccagttgcta     720
attgaacagt atggcctcat tatatatttt gatttatagg agtttgtgtc tgggctcaac     780
atgcta                                                                 786

      <210> 179
      <211> 796
      <212> DNA
      <213> Homo sapien

      <400> 179
tagcatgttg agcccagaca ctggttacaa gaccagacct gcttcctcca tatgtaaaca      60
gcttttaaaa agccagtgaa cctttttaat actttggcaa cctcctttca caggcaaaga     120
acacccccat ccgccccttg tttggagtgc agagtttggc tttggttctt tgccttgcct     180
ggagtatact tctaattcct gttgtcctgc acaagctgaa tacggagcta cccacggcca     240
cccaggccag gtttccactc atttattact ttatgtttct gttccattgc tggtccacag     300
aaataagttt tcctttggag gaatgtgatt atacccottt aatttcctcc ttttgctttt     360
ttttaatatc attggtatgt gtttggccca gaggaaactg aaattcacca tcatcttgac     420
tggcaatccc attaccatgc ttttttaaa aaacgtaatt tttcttgcct tacattggca     480
gagtagccct tcctggctac tggcttaatg tagtcactca gtttctaggt ggcattaggc     540
atgagacctg aagcacagac tgtcttacca caaaaggtga caagatctca aacttagcc      600
aaagggctat gtcaggtttc aatgctatcr gcttctgttc ctgctcactg ttctggatct     660
tgtccttctt catccctagc accagaattt cccagtctcc ctccctacct tcccttgttt     720
taactctaat ctatcagcaa aataaatttt caaatgtttt aacggtatc tccatgtgtc      780
tgggctcaac atgcta                                                      796

      <210> 180
      <211> 488
      <212> DNA
      <213> Homo sapien

      <400> 180
ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt      60
aaaacgacgg ccagtgaatt gtaatacgac tcactatagg gcgaattggg cccgacgtcg     120
catgctcccg gccgccatgg ccgcgggata gcatgttgag cccagccacc tgcaggtcat     180
ttggagagat ttttcacgtt accagcttga tggtcttttt caggaggaga gacactgagc     240
actcccaagg tgaggttgaa gatttcatct agataggcgg ataagaagac taggagggat     300
gcctagaaaa tgattagcat gcaaatttct acctgccatt tcagaactgt gtgtcagccc     360
acattcagct gctttttgtg aactgaaaag agagaggtat tgagactttt ctgatggccg     420
ctctaacatt gtaacacagt aatctgtgtg tgtgtgggtg tgtgtgtgtg tctgggctca     480
acatgcta                                                               488

      <210> 181
      <211> 317
      <212> DNA
      <213> Homo sapien

      <400> 181
tagcatgttg agcccagaca cggcgacggt acctgatgag tggggtgatg gcacctgtga      60
aaaggaggaa cgtcatcccc catgatattg gggacccaga tgatgaacca tggctccgcg     120
tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg aagtttgtgc     180
tgcaggttta tcgggactat tacctcaggg gtgatcaaaa cttcctgaag gacatgtggc     240
ctgtgtgtct agtaagggat gcacatgcag tggccagtgt gccagggta tggttggtgt      300
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